



OFFICE OF THE
BUILDING DEPARTMENT

TOWN OF VERNON

55 WEST MAIN STREET, VERNON, CT 06066

Tel: (860) 870-3633

Fax: (860) 870-3589

DECK CHECKLIST

- If well or septic is on the property- North Central District Health Department (860-872-1501) approval must be obtained in writing.

ATTENTION!!!

No applications will be accepted by the Building Department until this step is completed

- Completed Building Permit Application
- Completed Zoning Permit Application with:
 - Plot plan showing where the deck will be located with dimensions and distances to property lines (*NOTE: Decks close to setbacks or property lines may require a location survey by a licensed surveyor or engineer*)
- Completed *Deck Permit Application Information* form
- TWO SETS of diagrams of the following:
 - The deck floorplan drawn to scale showing dimensions, size and spacing of joists, beams and piers (see *Example Deck Framing, Footing Layout & Flashing Detail*)
 - An elevation plan showing height above finished ground, depth of piers, height of guardrails, and spacing of balusters (see *Example Elevation Plan*)
 - A stair detail showing rise and run of stairs, height of stairs, height of handrail, and spacing of balusters (see *Example Stair Detail*)
- The following inspections are REQUIRED:
 - Piers or footings prior to pouring of concrete
 - Rough framing to include ledger attachment and flashing
 - Final

Please call the Building Department's main number at (860) 870-3633 at least **48 hours** in advance to schedule all inspections



TOWN OF VERNON – BUILDING DEPARTMENT

55 West Main Street • Vernon, CT 06066

Phone: (860) 870-3633 • Fax: (860) 870-3589 • Website: www.vernon-ct.gov • Building@vernon-ct.gov

PERMIT APPLICATION

Permit Number _____

ADDRESS OF WORK LOCATION: _____

TYPE OF PERMIT: ☐ COMMERCIAL ☐ RESIDENTIAL/TWO-FAMILY ☐ MULTI FAMILY (3 OR MORE)

☒ **BUILDING**

- ☐ New Construction
- ☐ Addition
- ☐ Renovation
- ☐ Accessory Structure
- ☒ Deck
- ☒ Demolition
- ☐ Roofing (# Squares) _____
- ☐ Pool A/G _____ I/G _____
- ☐ Siding
- ☐ Stoves
- ☐ Other _____

☐ **ELECTRICAL**

- ☐ Service Change
- ☐ CRS# _____
- ☐ New Construction
- ☐ Addition
- ☐ Renovation
- ☐ Pool Wiring
- ☐ Low Voltage
- ☐ Solar
- ☐ Other _____

☐ **PLUMBING**

- ☐ New Construction
- ☐ Addition
- ☐ Renovation
- ☐ Fire Suppression
- ☐ Water Heater
- ☐ Fuel Tank
- ☐ Other _____

☐ **HVAC**

- ☐ New Construction
- ☐ Addition
- ☐ Renovation
- ☐ Central Air
- ☐ Replace/Repair
- ☐ Boiler/Furnace
- ☐ Other _____

Will there be any excavation, i.e. foundation, trenching, etc.? ☐ Yes ☐ No

☐ Public Water

☐ Sewer

☐ Well

☐ Septic

DESCRIPTION OF WORK (must be completed for all permits) _____

Fair Market Value (Labor + Material) \$ _____ Fees: \$ _____ (Permit) \$ _____ (Z) \$ _____ (PR)
\$ _____ (CO/CA) \$ _____ (DF)

Property Owner: _____

Mailing Address: _____ Town: _____ State: _____ Zip: _____

E-Mail: _____ Phone Number: _____

Applicant: _____ Lic.# _____ Type: _____ Exp: _____

Mailing Address: _____ Town: _____ State: _____ Zip: _____

E-Mail: _____ Phone Number: _____

Certification: I hereby certify that: ☐ I am the owner of record of the named property, or: ☐ that the proposed work is authorized by the owner of record and/or I have been authorized to make this application as an authorized agent, and we agree to conform to all applicable codes, laws, regulations and ordinances. All information contained within is true and accurate to the best of my knowledge and belief. No work shall start until the applicant has received the signed approved permit.

- ☐ Contractor
- ☐ Applicant
- ☐ Owner

Signature of Owner/Authorized Agent _____

Printed Name of Signatory _____

Date _____

ZONING PERMIT APPLICATION INSTRUCTIONS

An original of the following information must be submitted. **This application is not complete and will not be processed until all of the required materials are submitted.**

- a. **The FEE for this application shall be \$25.00.**
 - b. **Application form** to be completed by applicant.
 - c. **Plot Plan**
 - **All existing and any new proposed buildings, additions and structures, and their dimensions, must be shown, including decks, patios, driveways, sidewalks, pools, garages and sheds.**
 - **Any new proposed buildings, additions and structures shall show the distance to the property lines from said structure (front, rear and side yards).**
 - **Size and dimensions of lot and existing proposed lot coverage.**
 - **The plot plan must be based on a survey prepared by a licensed Surveyor, Civil Engineer or Architect. For small projects (such as decks, patios, above ground pools, sheds) the blank plot plan attached hereto may be acceptable in lieu of a survey (see Page 3).**
- NOTE: An As-Built Survey and/or Foundation Location Survey May Be Required depending on scope of project.**
- d. **Scaled Floor Plans** whether new construction, alteration and/or addition.
 - e. **Elevation Drawings** showing building height based on the vertical distance of a building measured from the average elevation of the finished grade adjacent to the to the exterior wall of the building to the highest point of the roof. When the finished ground level slopes away from an exterior wall, the distance will be calculated bases on the lowest points within the area between the building and the lot line or, when the lot line is more than ten feet from the building, between the building and a point ten feet from the building. (May be submitted as part of the Building Permit Application)
 - f. If **Variances** were granted for the property, buildings and/or additions, submit a copy of the recorded variance with the Town Clerks stamp.

FEE: \$25.00

TOWN OF VERNON
ZONING PERMIT

ZP # _____

This permit is hereby applied for in accordance with the requirements of the Vernon Zoning Regulations and other land use regulations as applicable, per plans attached.

PROPERTY ADDRESS _____

ZONING DISTRICT _____
(FOR ZONING USE ONLY)

PROPERTY OWNER _____

PHONE # _____

PROPERTY OWNER ADDRESS _____

Type of Permit ☐ New Construction ☐ Swimming Pool ☐ Change of Use ☐ Addition ☐ Solar
 ☐ Sign ☐ Excavation/fill ☐ Accessory Building/Structure ☐ Other

Description of activity for which permit is sought:

Property Use: ☐ Single Family ☐ Commercial/Business ☐ Mixed Uses ☐ Non-Profit
 ☐ Multi Family ☐ Industrial/Mfg. ☐ 2-3 family ☐ Other

Utilities: ☐ Public Water ☐ Well ☐ Public Sewer ☐ Septic

This zoning permit is based on the plot plan and information submitted by applicant. This permit is subject to all conditions (if any) of approval, attached by any board/commission and/or department of jurisdiction. Falsification by omission or misrepresentation, or failure to comply with the conditions of approval or record, shall constitute a violation of the Vernon Zoning Regulations. Applicant certifies that property owner approves this application.

AN AS-BUILT SURVEY AND/OR FOUNDATION LOCATION SURVEY MAY BE REQUIRED.

APPLICANT(S) SIGNATURE _____ Date _____

PRINTED NAME _____

ADDRESS _____

TELEPHONE NUMBERS _____

APPLICANT – DO NOT WRITE BELOW THIS LINE

Restrictions/Conditions:

Prior Approval(s): ☐ Site plan ☐ Special Permit ☐ Re-subdivision ☐ Subdivision ☐ Flood Plain
 ☐ Substantial Improvement ☐ Wetlands ☐ Flood Hazard Area ☐ Zone Change ☐ Other

ZBA Variance(s) _____ Granted on: _____

Permit Issuer

Andy Marchese, Zoning Enforcement Officer

Date

CC: Applicant _____

PLOT PLAN

Please include all structures and dimensions

NAME _____

Date _____

ADDRESS _____

Tel. _____

PERCENTAGE OF LOT COVERAGE _____
(FOR ZONING USE ONLY) Lot coverage includes all structures and paved surfaces

**DRAW IN ALL BUILDINGS, ADDITIONS, STRUCTURES, DECKS, PATIOS,
DRIVEWAYS, SIDEWALKS, POOLS, GARAGES, SHEDS AND THEIR DIMENSIONS**

**DRAW IN NEW STRUCTURE WITH DIMENSIONS
and DISTANCES TO ALL PROPERTY LINES**

DRAW IN LOCATION OF WELL AND SEPTIC IF APPLICABLE

Rear Yard

Side Yard

Side Yard

HOUSE

Front Yard

**PROPERTY SETBACKS VARY – MOST RESIDENTIAL LOTS HAVE A
SETBACK OF 30' FROM FRONT, 20' FROM REAR & 10' FROM SIDE
CORNER LOTS MUST BE DISCUSSED WITH ZONING
TO VERIFY SETBACKS**

Vernon Building Department

55 west Main Street, Vernon, CT 06066

860-870-3633

DECK PERMIT APPLICATION INFORMATION

1. Health Department approval is required if there is a well and/or septic system on the property. Contact North Central District Health Department (NCDHD) for information at 860-872-1501.

2. TWO SETS of construction drawings are required containing the following:

- a. A deck floorplan (drawn to scale) (see Example Floorplan)
- b. An elevation plan (see Example Elevation Plans)
- c. A stair detail (see Example Stair Detail)

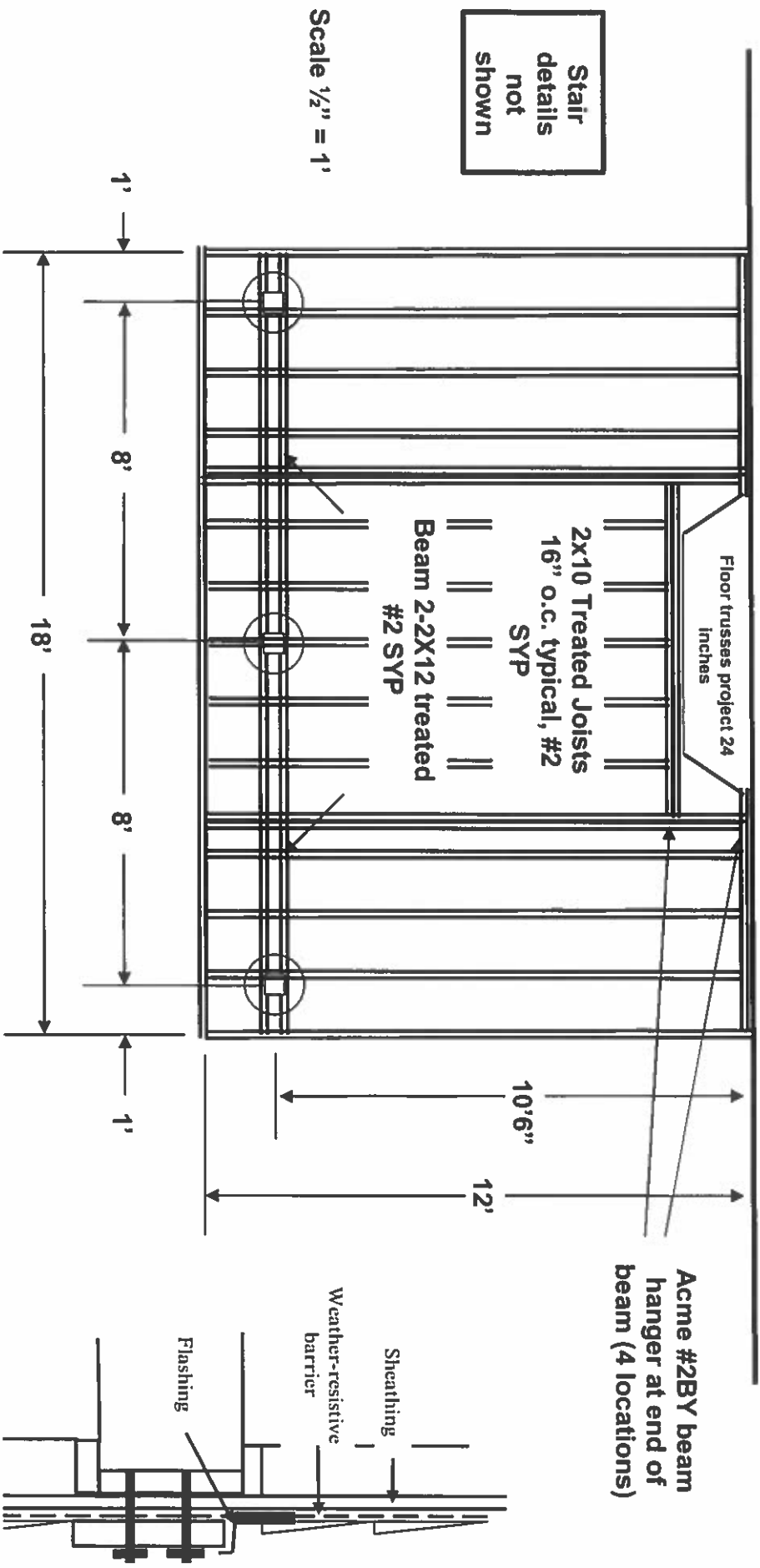
***Approved plans MUST be on site during all inspections**

3. Please answers to the following questions:

- a. Size of deck _____
- b. Height of deck above grade at highest point _____
- c. Size of joists _____
- d. Spacing of joists _____
- e. Size of decking material _____
- f. Type of decking material _____
- g. Size of posts _____
- h. Spacing of posts _____
- i. Size of beams _____
- j. Type of beams _____
- k. Size of piers _____
- l. Depth of piers _____
- m. Guardrail height _____
- n. Stair rise & run _____
- o. Stair Guardrail height _____
- p. Are there any overhead utilities above the deck? _____

EXAMPLE DECK FRAMING PLAN, FOOTING LAYOUT & FLASHING DETAIL

TOWN OF VERNON

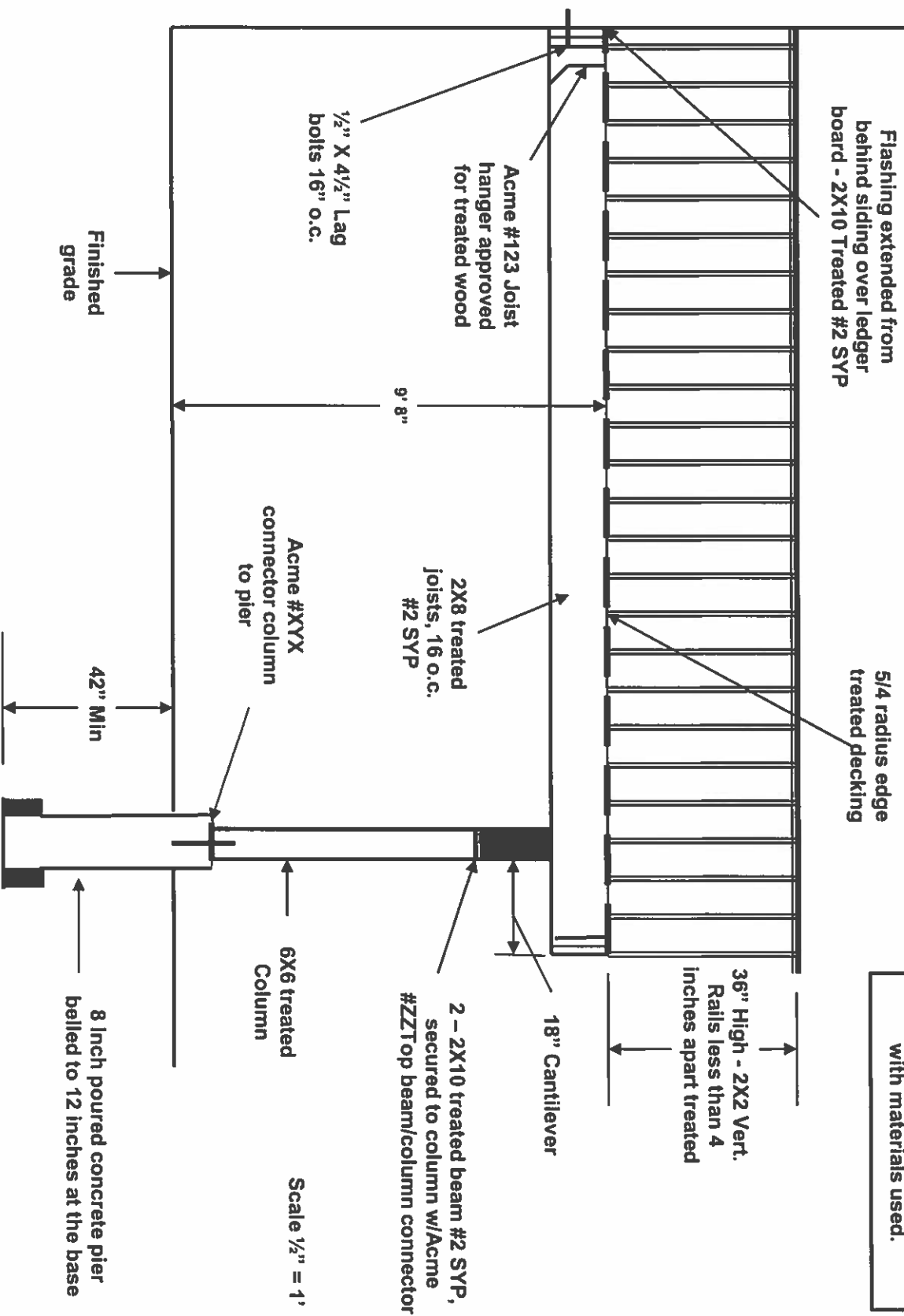


Note about House cantilevers: Occasionally home designs include a cantilever of the floor system at the patio door. Decks may not be attached to the cantilevered joists unless the house floor framing is engineered for the deck loads.

WARNING: THIS IS AN ILLUSTRATION ONLY. IT IS INTENDED TO SHOW SOME OF THE INFORMATION THAT SHOULD BE INCLUDED ON YOUR DECK PLANS. IT IS NOT INTENDED TO SHOW COMPLIANCE WITH ANY CODES THAT MAY APPLY. CHANGES IN THE HEIGHT AND SIZE OF A DECK WILL CAUSE VARIATIONS IN CODE REQUIREMENTS.

EXAMPLE ELEVATION DETAIL TOWN OF VERNON

Note: All fasteners and connectors will be compatible with materials used.



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EXAMPLE STAIR DETAIL TOWN OF VERNON

See deck cross section for guard design

Top of handrail – 34-38 inches above nosing of treads. Ends returned of circular cross section of 1 1/4 to 2 inches

Acme #SS strap to secure stair to landing

48"

9" Min Run

8 1/4" Max Rise

3 – 2X12 Green treated stringers, #2 SYP

Landing constructed of patio pavers

Handrail Detail

1 1/2" clearance

2"

2X2 Green treated spindles at 4 3/8" o.c.

Open space between treads less than 4"

2X12 Green treated stair treads

Scale 1/2" = 1'

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DECK INFORMATIONAL HANDOUT

All information in this handout pertains to one and two family homes and is based on the 2018 Connecticut Building Code. The Town of Vernon is offering this information to help homeowners and contractors understand typical code requirements. It is not intended to replace the code, or the builder's and homeowner's responsibility to follow the entire code. The Town of Vernon assumes no responsibility for any errors or omissions.

Vernon Building Department

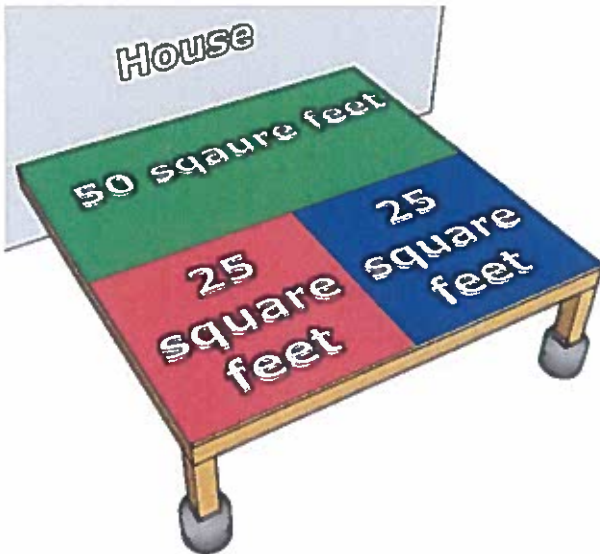
55 west Main Street, Vernon, CT 06066

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DECK INFORMATIONAL HANDOUT

DECK PIERS- In order to determine the proper size for your footings, you will need to establish how much total weight they are going to have to support and what kind of soil they are covering. To calculate the load, you should use 40lbs per square foot for live loads (these are variable loads that are dynamic such as the weight of people and furniture) and 10lbs per square foot for dead loads (this is the weight of the materials used for the construction of the deck) for a total load weight of 50lbs per square foot.

For example, if you are building a 10x10 deck attached to a house with two footings on the corners, you could calculate the loads for the footings in the following way. First, draw a line dividing the deck into two halves between the house and the footings. The load for the section nearest the house will be transferred back to the ledger board and carried down to the house foundation. The remaining half of the deck will again be split into two parts to be supported by the two corner footings. This is called the tributary load. If you multiply the area of this section 5' x 5', you will get 25 square feet. You can multiply this area by 50lbs per square foot loading to come up with 1,250lbs total load. Once you know the total load, you can use the chart below to determine the footing size for your soil conditions. Always be sure to check your calculations with your local building inspections department before digging.



MAXIMUM ALLOWABLE LOAD PER FOOTING IN LBS:

Diameter of Pier	Square Foot Multiplier	2000lb Load (Sand & Silty Sand)	3000lb Load (sandy-gravel & gravel) *Most Common Soil*	4000lb Load (sedimentary rock)
6 inch	.20	400	600	800
8 inch	.35	700	1050	1400
10 inch	.55	1100	1650	2200
12 inch	.79	1580	2370	3160
14 inch	1.1	2200	3300	4400

Maximum Joist Spacing for Decks

Table 1:1

Decking Type	Perpendicular to Joist	Diagonal to Joist (Maximum angle of 45° from perpendicular)
Wood- 1 ½" Thick	16" OC	12" OC
Wood- 2" Thick	24" OC	16" OC
Plastic Composite	In Compliance with ASTM D 7032 As Per Manufacturer Specifications	In Compliance with ASTM D 7032 As Per Manufacturer Specifications

Southern Pine Deck Joist Maximum Spans

Table 1:2 No Cantilever

Lumber Size	Joist Spacing- 12" OC	Joist Spacing- 16" OC	Joist Spacing- 24" OC
2 X 6	9'11"	9'	7' 7"
2 X 8	13'1"	11' 10"	9' 8"
2 X 10	16' 2"	14'	11'5"
2 X 12	18'	16'6"	13'6"

Table 1:3 With Cantilever*

Lumber Size	Joist Spacing- 12" OC	Joist Spacing- 16" OC	Joist Spacing- 24" OC
2 X 6	6'8"	6'8"	6'8"
2 X 8	10'1"	10' 1"	9' 8"
2 X 10	14' 6"	14'	11'5"
2 X 12	18'	16'6"	13'6"

*Joists may cantilever up to ¼ of the actual adjacent span. For example, a 2 x 12 joist placed 16" OC, spanning 16'-6" between supports may cantilever up to an additional 4'-1 ½" for a total maximum length of 20' -7 ½"

Southern Pine Deck Beam Maximum Spans*

Table 1:4

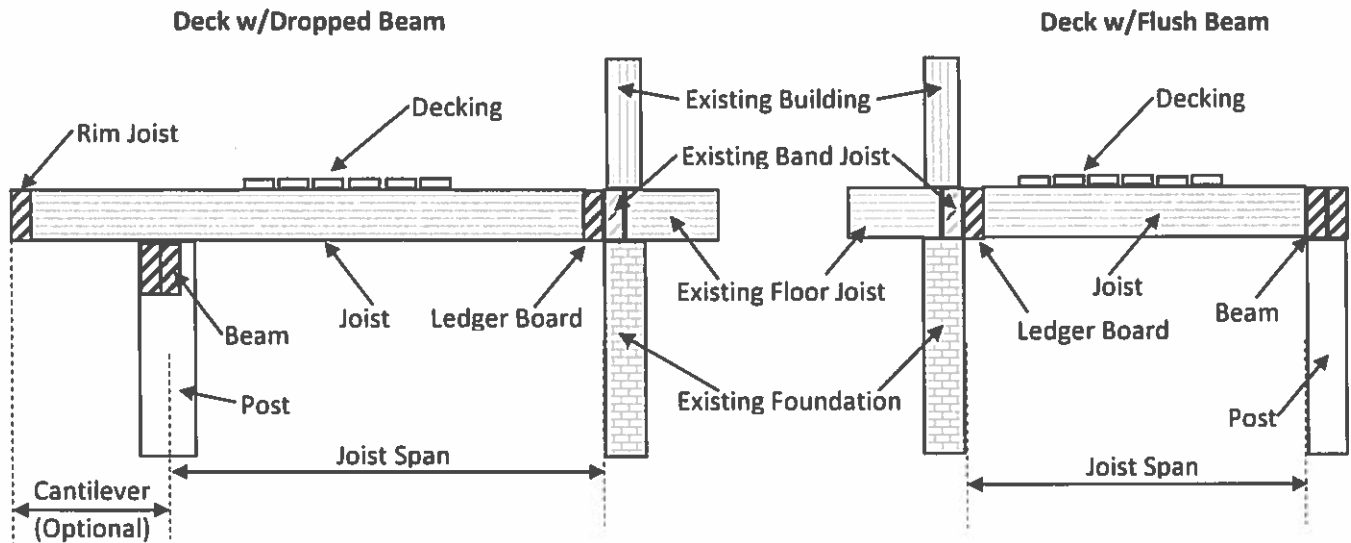
Lumber Size	Total Deck Joist Span (including cantilever) (Less than or equal to)						
	6'	8'	10'	12'	14'	16'	18'
2- 2 X 6	6'11"	5'11"	5'4"	4'10"	4'6"	4'3"	4'
2- 2 X 8	8'9"	7'7"	6'9"	6'2"	5'9"	5'4"	5'
2- 2 X 10	10'4"	9'	8'	7'4"	6'9"	6'4"	6'
2- 2 X 12	12'2"	10'7"	9'5"	8'7"	8'	7'6"	7'
3- 2 X 6	8'2"	7'5"	6'8"	6'1"	5'8"	5'3"	5'
3- 2 X 8	10'10"	9'6"	8'6"	7'9"	7'2"	6'8"	6'4"
3- 2 X 10	13'	11'3"	10'	9'2"	8'6"	7'11"	7'6"
3- 2 X 12	15'3"	13'3"	11'10"	10'9"	10'	9'4"	8'10"

*Beams may cantilever at each end up to ¼ of the of the actual beam span. For example, a 16' beam span can cantilever a maximum of 4'.

HOW TO USE THE SPAN TABLES ON PREVIOUS PAGE

1. Determine the decking board thickness and direction to determine joist spacing. (Table 1:1)
2. Decide whether the joists will cantilever over or not. Then using the lumber size of joists and the joist spacing, determine if you are within the maximum allowable joist span. (Table 1:2 or Table 1:3)
3. Using the beam span table, select your beam lumber size. Where it intersects with the deck joist span provides you with the maximum spacing between your posts.(Table 1:4)

Deck Terminology

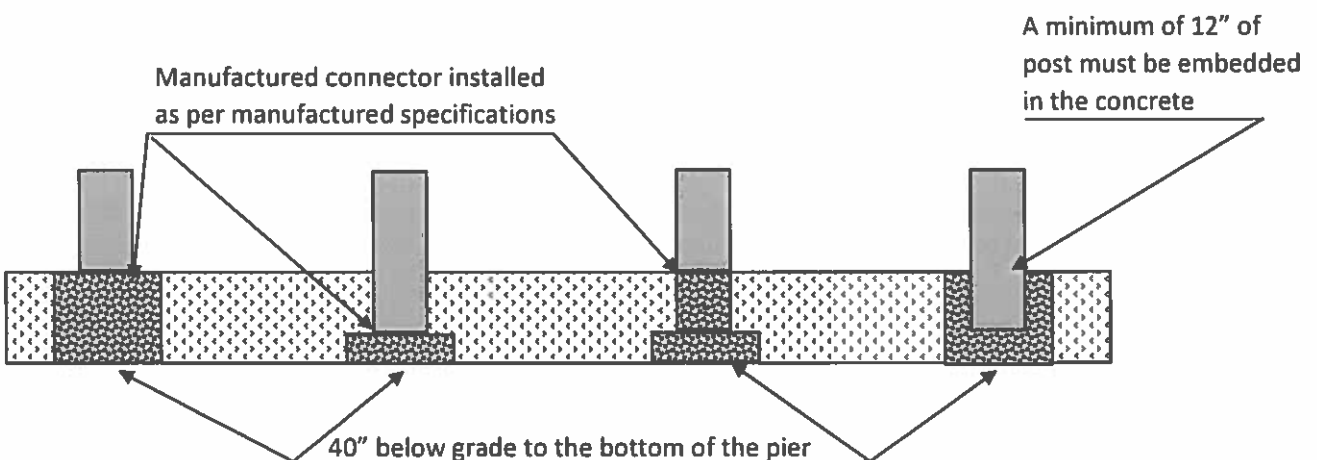


Deck Posts Maximum Height

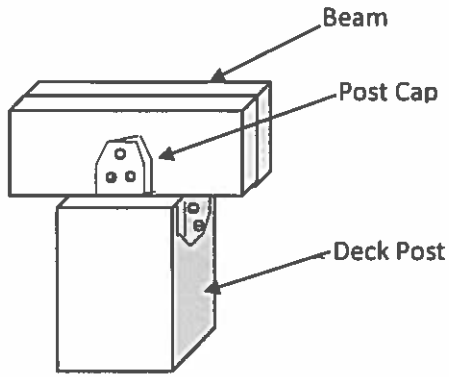
4 X 4 or 4 X 6 Post - 8' High- measured to the underside of the beam

6 X 6 Post - 14' High- measured to the underside of the beam

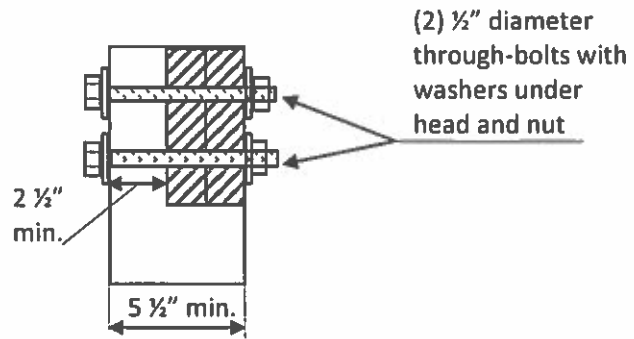
Deck Post to Deck Footing Requirements



Deck Post to Deck Beam Requirements

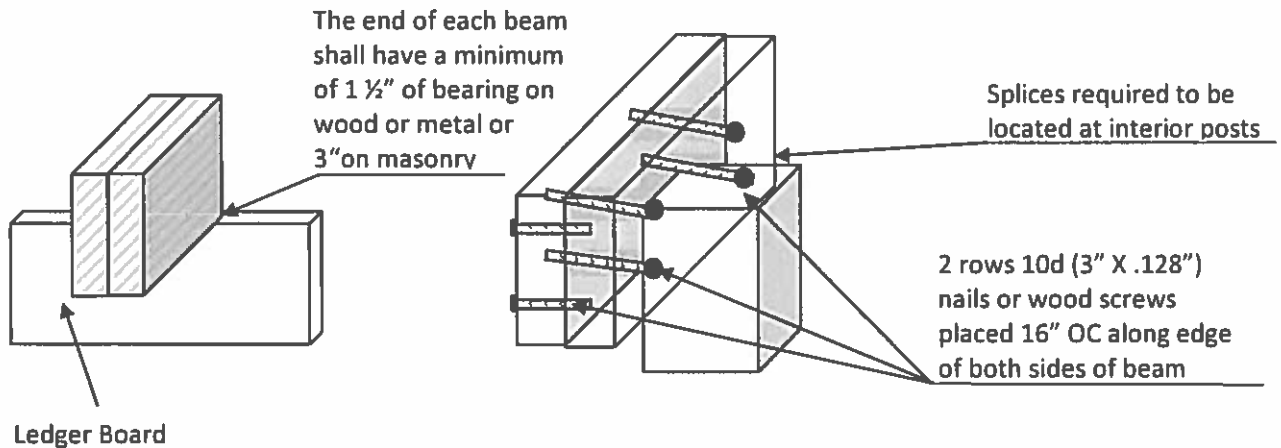


Post Cap Requirements

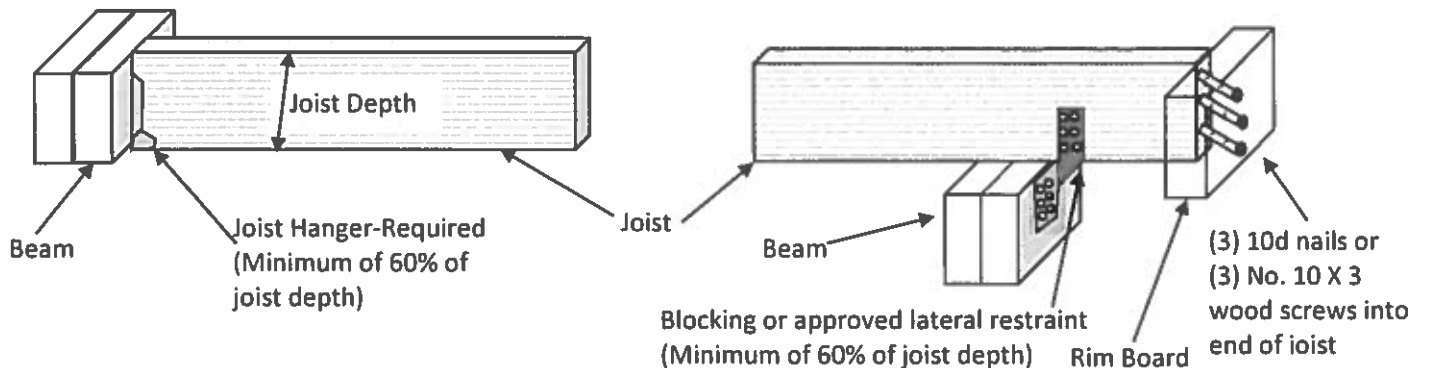


Notched Post to Beam Requirements

Deck Beam Requirements

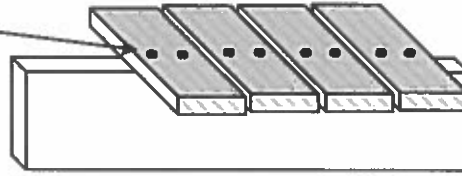


Deck Joist Requirements



Deck Flooring Requirements

Decking must be attached to every supporting member with (2) 8d threaded nails or (2) No. 8 wood screws



Deck Ledger Connection to Band Joist Requirements*

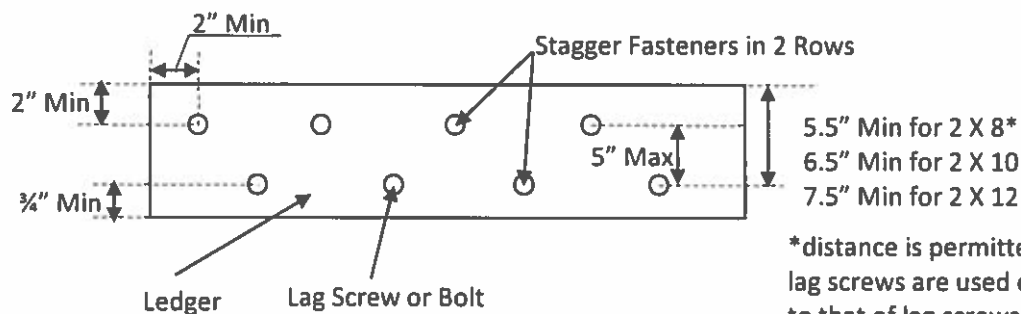
Connection Details	Joist Span						
	6' or less	6'1" to 8'	8'1" to 10'	10'1" to 12'	12'1" to 14'	14'1" to 16'	16'1" to 18'
½" diameter lag screw with ½" maximum sheathing	30" OC	23" OC	18" OC	15" OC	13" OC	11" OC	10" OC
½" diameter bolt with ½" maximum sheathing	36" OC	36" OC	34" OC	29" OC	24" OC	21" OC	19" OC
½" diameter bolt with 1" maximum sheathing	36" OC	36" OC	29" OC	24" OC	21" OC	18" OC	16" OC

*Lag screws, bolts, and washers must be stainless steel or hot-dipped galvanized.

Placement of Lag Screws/Bolts

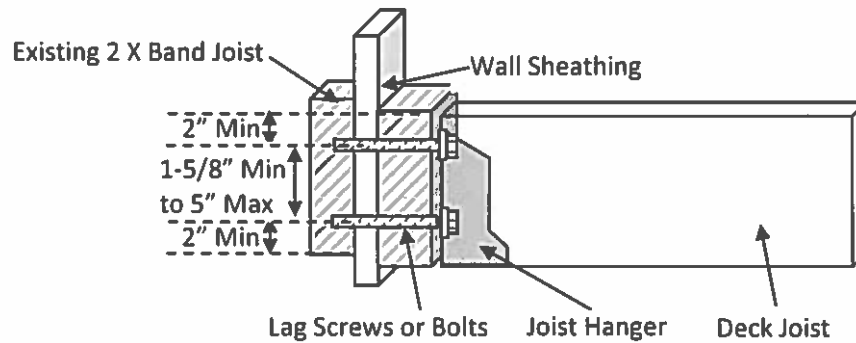
Minimum End, Edge, & Row Spacing Distances				
	Top Edge	Bottom Edge	End	Row Spacing
Ledger	2"	¾"	2"	1 5/8"
Band Joist	¾"	2"	2"	1 5/8"

Placement of Lag Screw/Bolt in Ledger Board



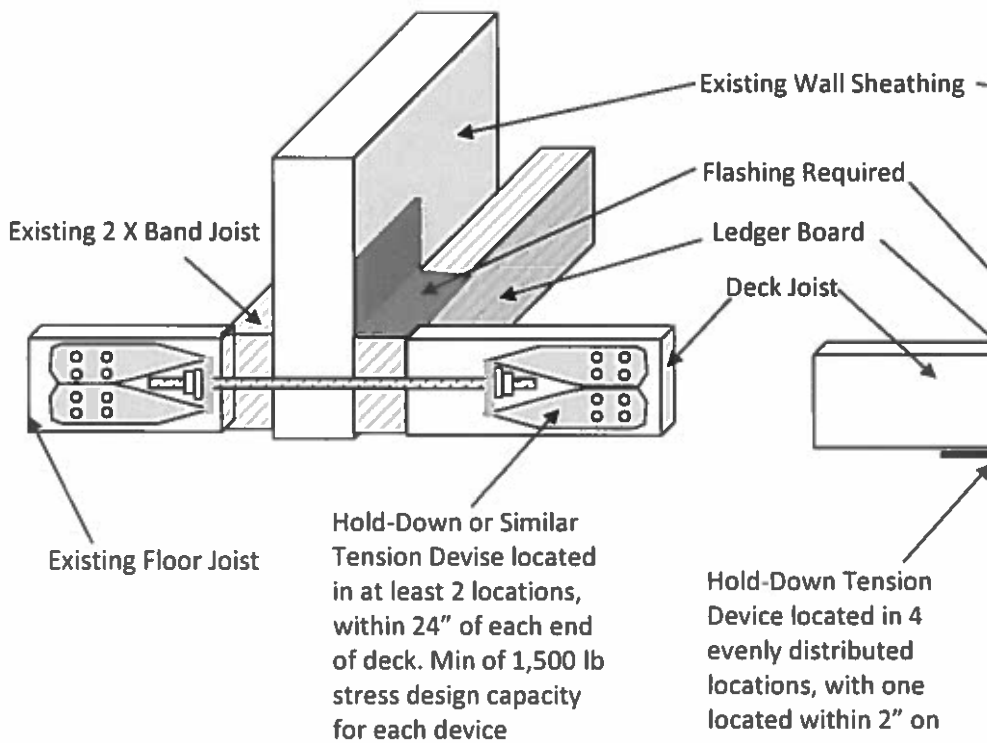
*distance is permitted to be reduced to 4.5" if lag screws are used or bolt spacing is reduced to that of lag screws to attach 2 X 8 ledger & band joist

Placement of Lag Screw/Bolt in Band Joist

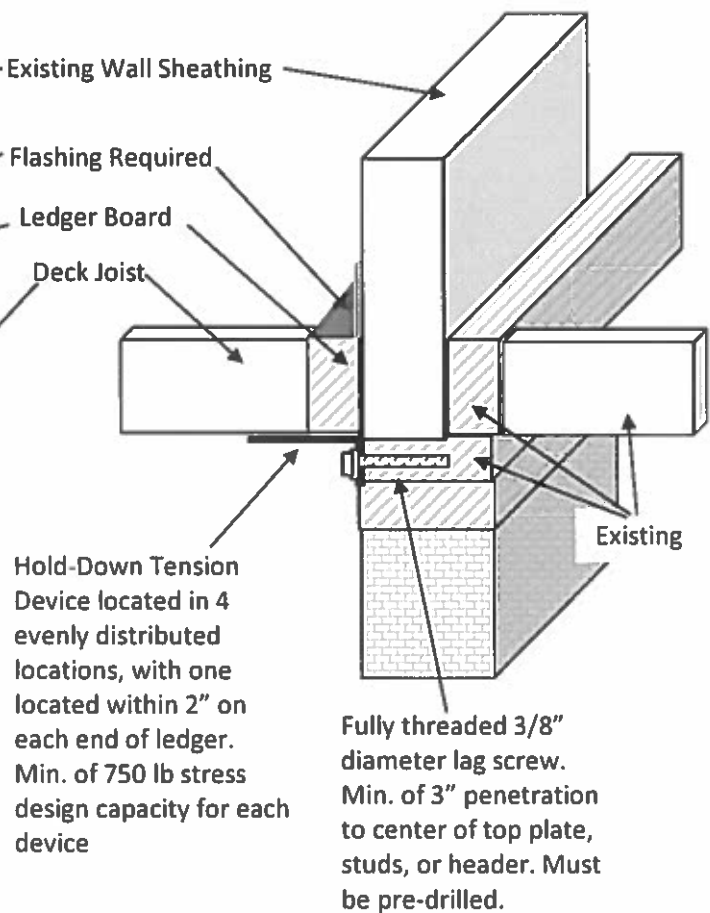


Lateral Load Connection Requirements

Option 1



Option 2*



***Option 2 is permitted only when floor joists run parallel to deck joist**

Vernon Building Department

55 west Main Street, Vernon, CT 06066

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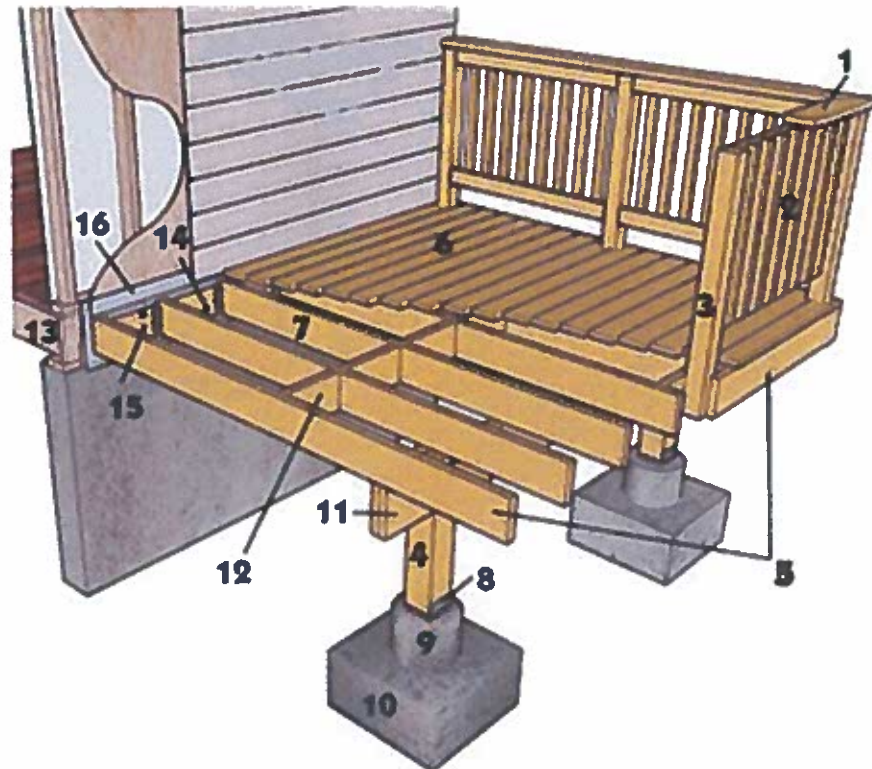
ILLUSTRATED GUIDE TO DECKS

The purpose of this handout is to provide illustrations of common deck construction techniques. It is not the purpose of this handout to endorse any of the methods show or limit designs to those shown here. The techniques shown may not be suitable for some designs, soil types, or locations. While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the Connecticut State Building Code or contact the Building Department.

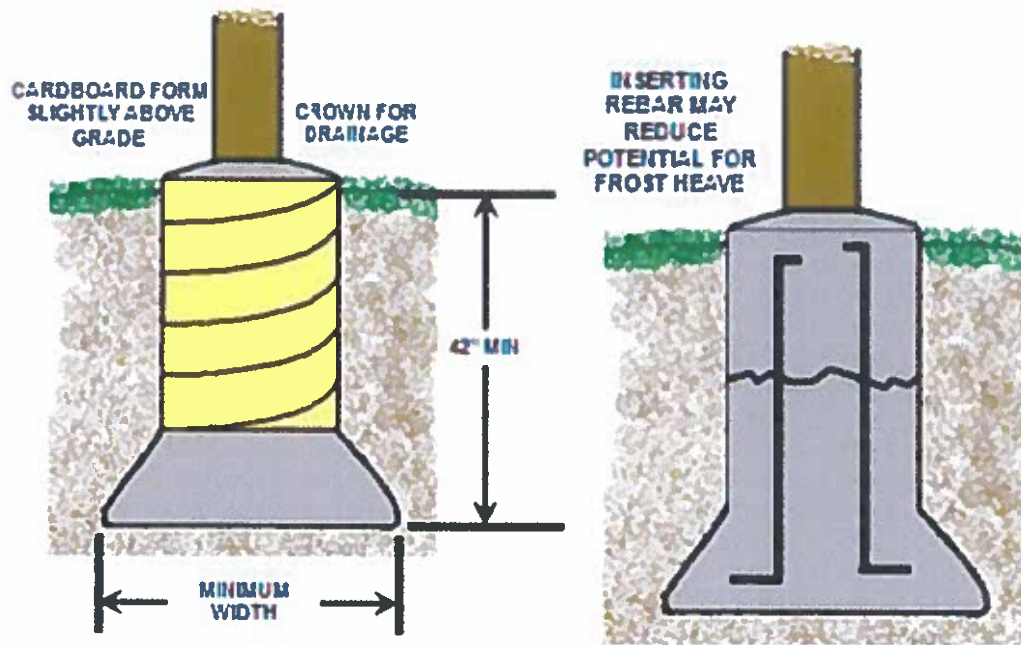
For charts on joist/beam spans, column/footing sizing, and cantilever projections, see the handouts or the 2015 IRC.

TERMINOLOGY

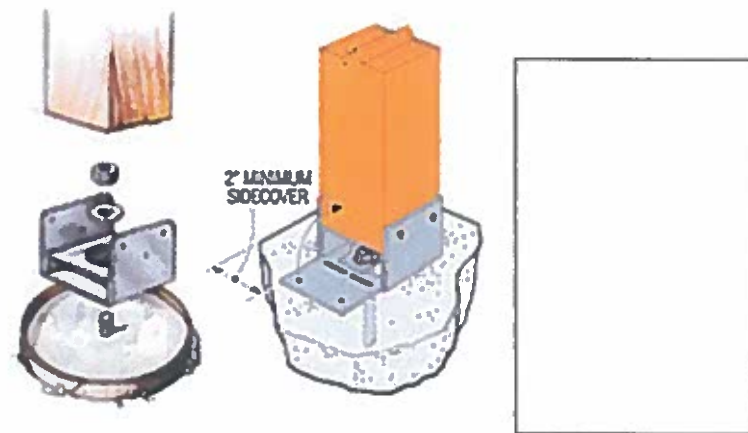
1. RAIL TOP CAP
2. BALLUSTERS
3. RAIL POST
4. SUPPORT POST
5. RIM OR BAND JOIST
6. DECKING
7. JOISTS
8. POST BASE CONNECTOR
9. PIER
10. FOOTING
11. DROP BEAM
12. BLOCKING
13. HOUSE JOIST
14. ½" BOLTS
15. LEDGER BOARD
16. FLASHING



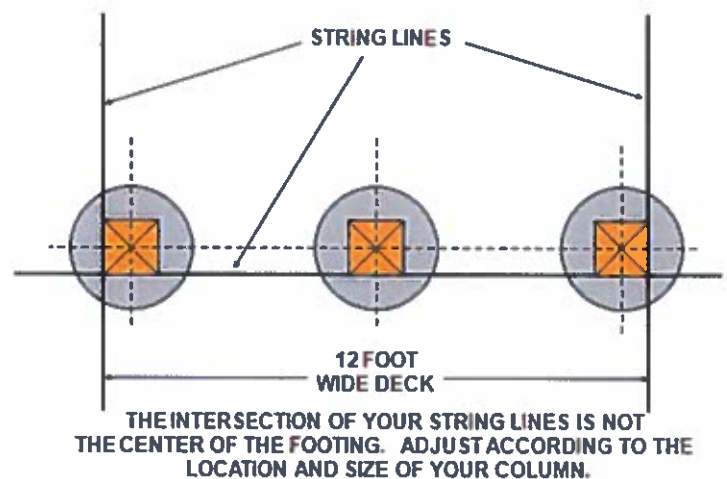
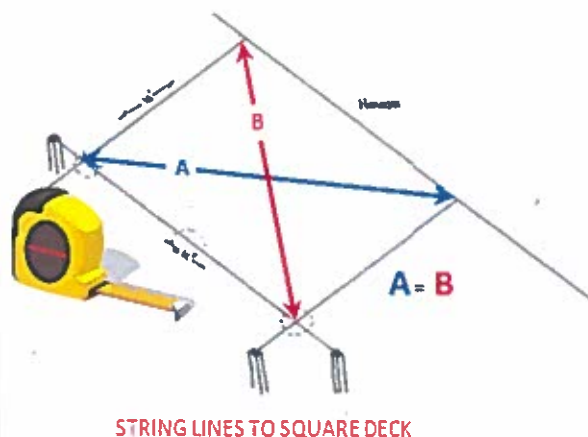
FOOTINGS



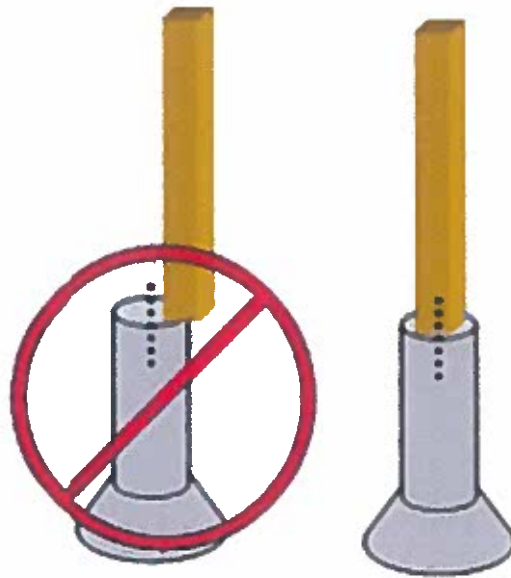
ANCHORING POST



WHERE DO I PUT MY FOOTINGS?

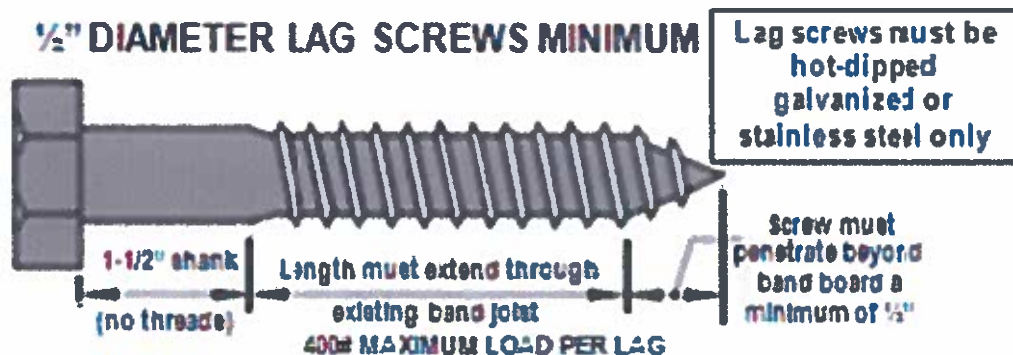
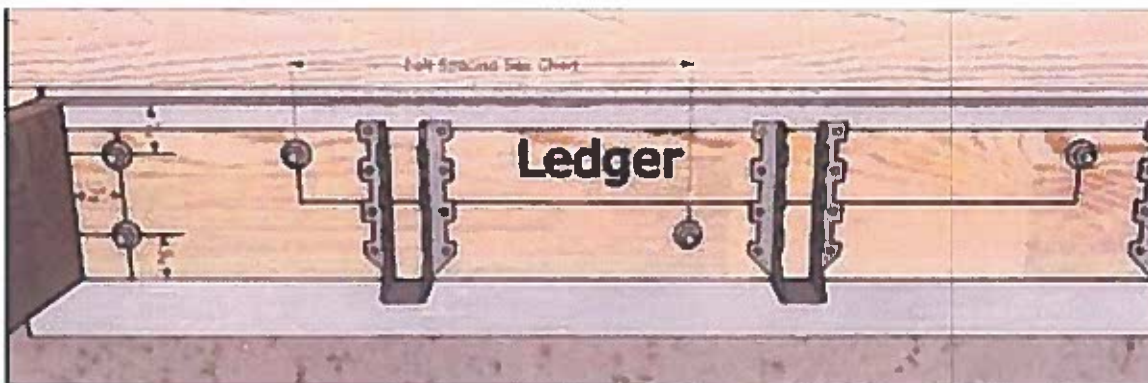


**THE REQUIRED AREA OF THE COLUMN
SHOULD FULLY BEAR ON THE FOOTING**



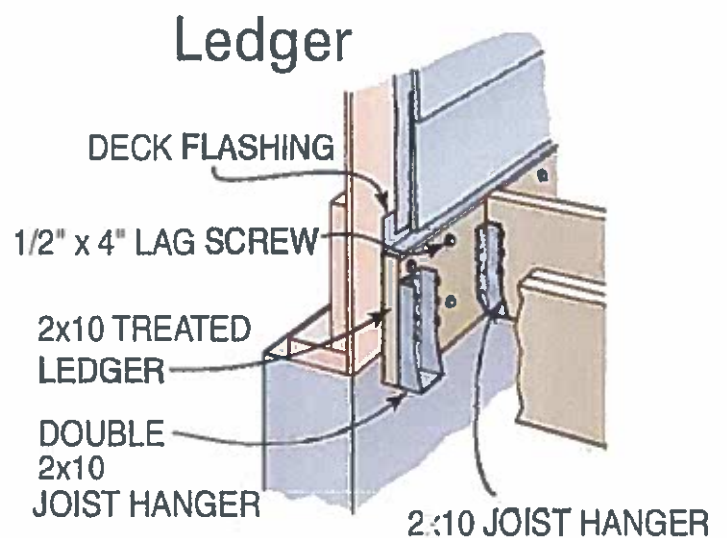
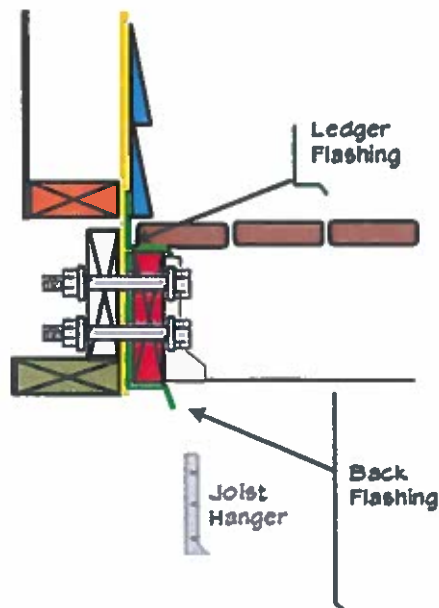
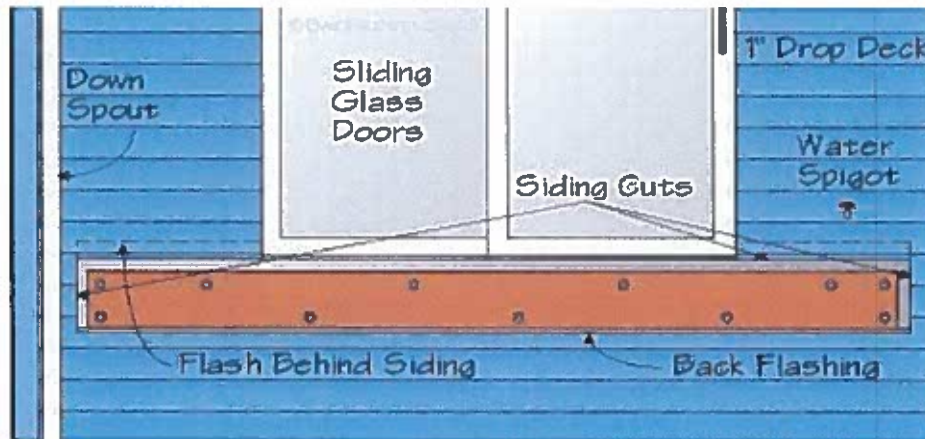
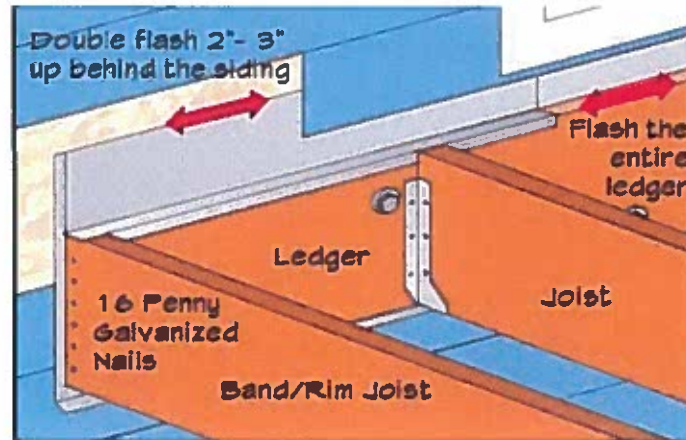
ATTACHING LEDGERS

The lag screws or bolts shall be placed 2 inches in from the bottom or top of the deck ledgers and between 2 and 5 inches in from the ends. The lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger.

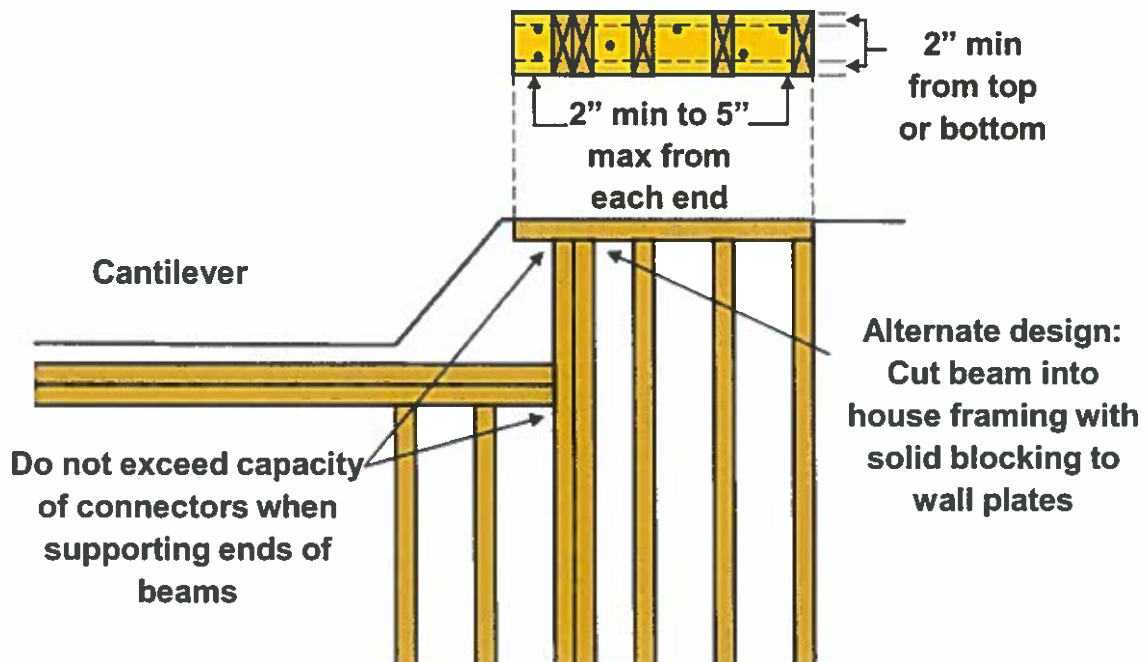
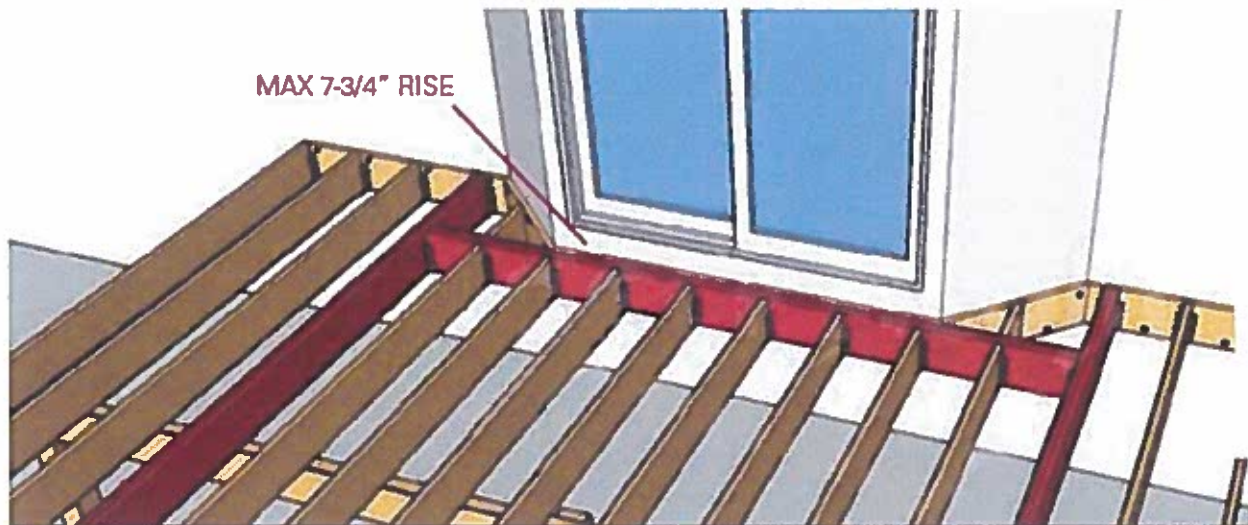
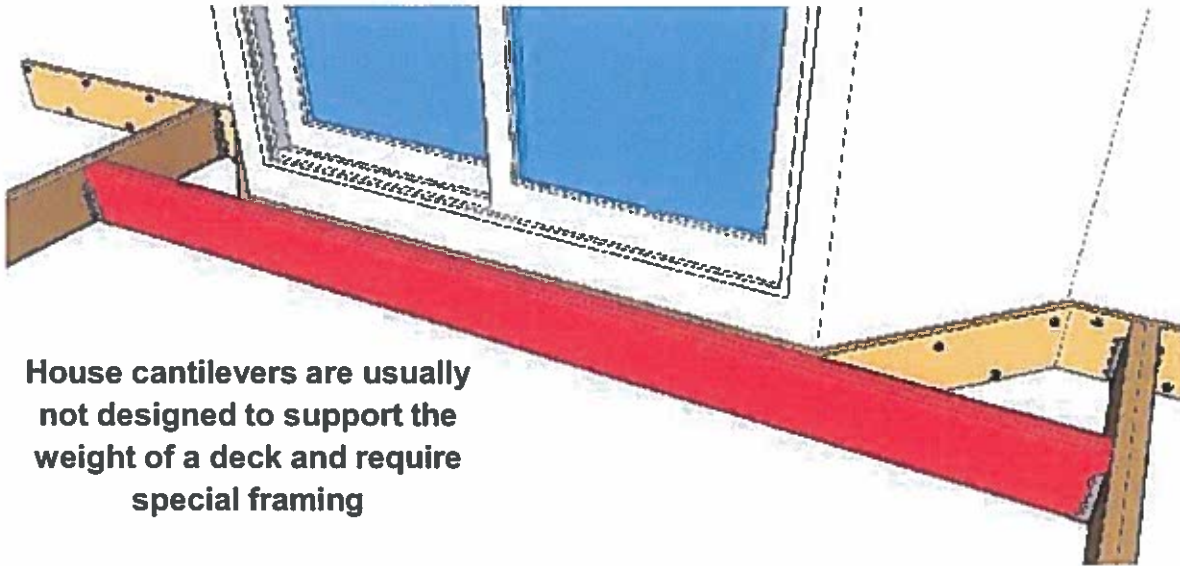


**OR EQUIVALENT "LEDGERLOK"-TYPE SCREWS
TYPICALLY ONE OR TWO PER JOIST BAY**

FLASHING LEDGERS

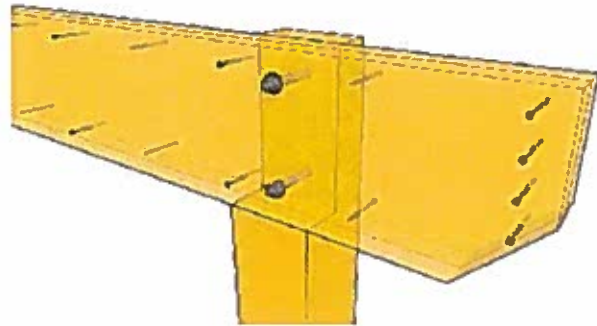
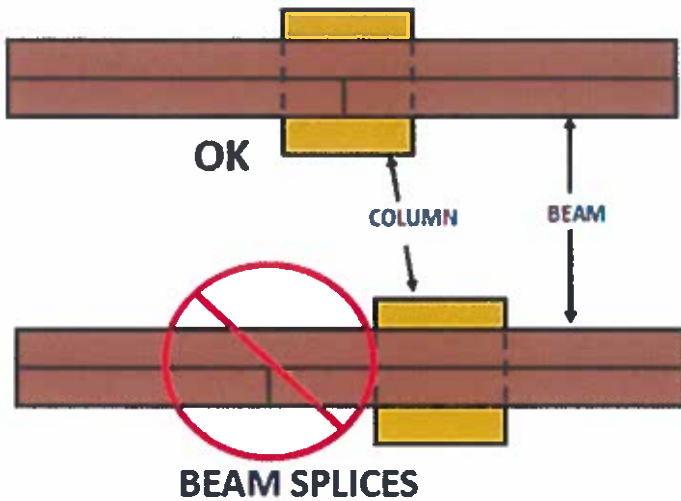


HOUSE CANTILEVERS



BEAMS

ONE FOOT MAXIMUM
CANTILEVER BEYOND COLUMN



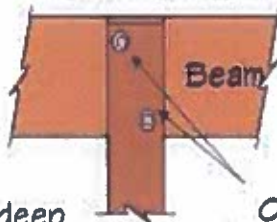
Beam Pocket Cut Into A 6x6 Support Post

Section View



Cut 3" deep
beam pocket for
Beam to rest on

Elevation View



Off Set (2)
6" x 1/2" Carriage
Bolts With Washers

Top View



BEAM
SECURED
WITH
POST
CAP

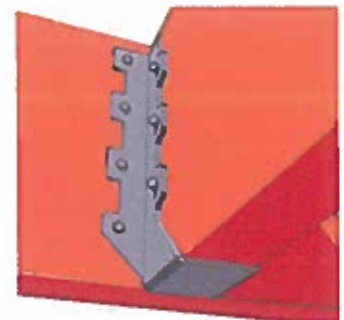
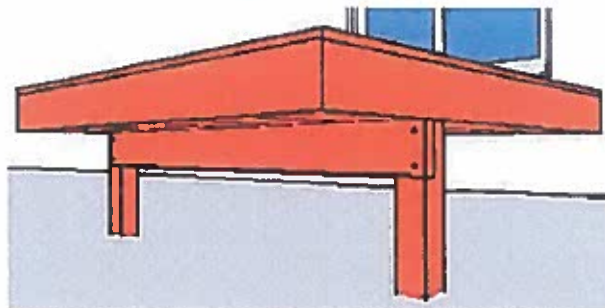
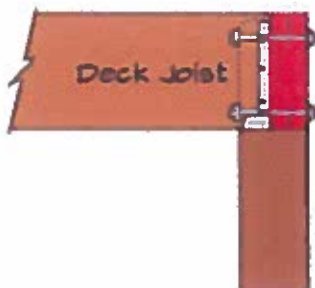


BEAM
SECURED WITH
BOLTS TO
NOTCHED
COLUMN

JOISTS MAY EITHER FRAME INTO THE SIDE OF A
BEAM WITH JOIST HANGERS OR REST ON A

Header beam

DROPPED BEAM

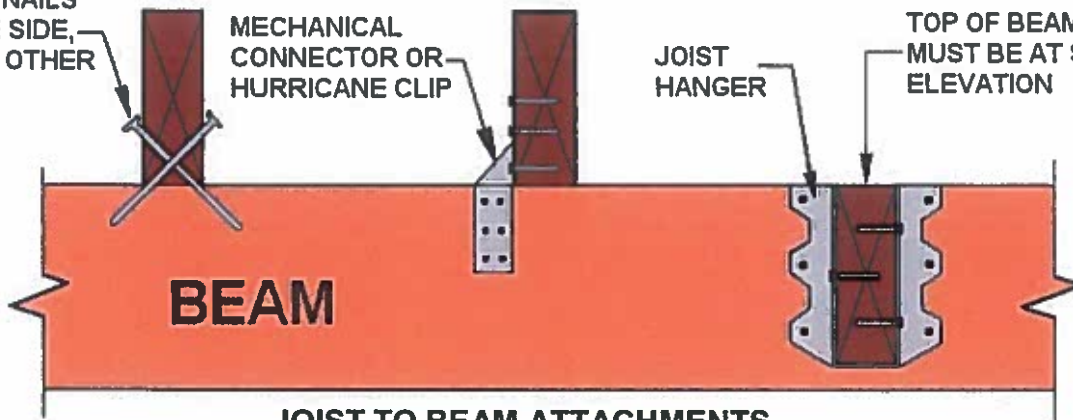


3-8D TOE NAILS
2 ON ONE SIDE,
1 ON THE OTHER

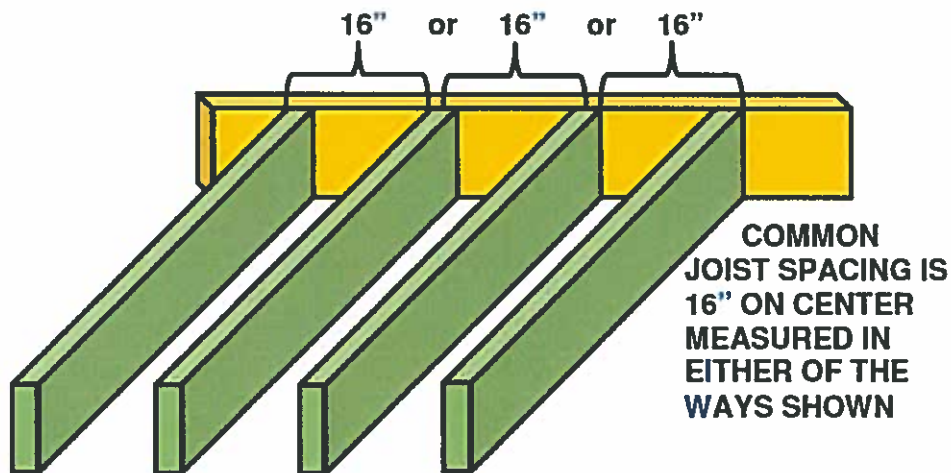
MECHANICAL
CONNECTOR OR
HURRICANE CLIP

JOIST
HANGER

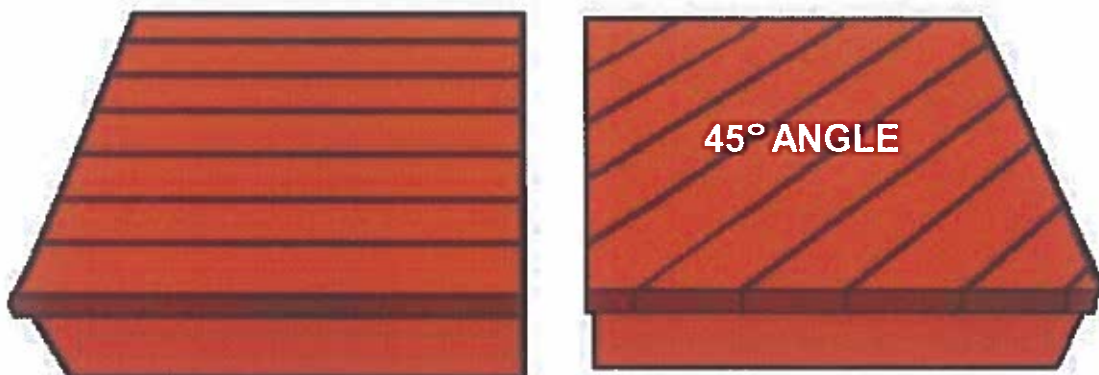
TOP OF BEAM AND JOIST
MUST BE AT SAME
ELEVATION

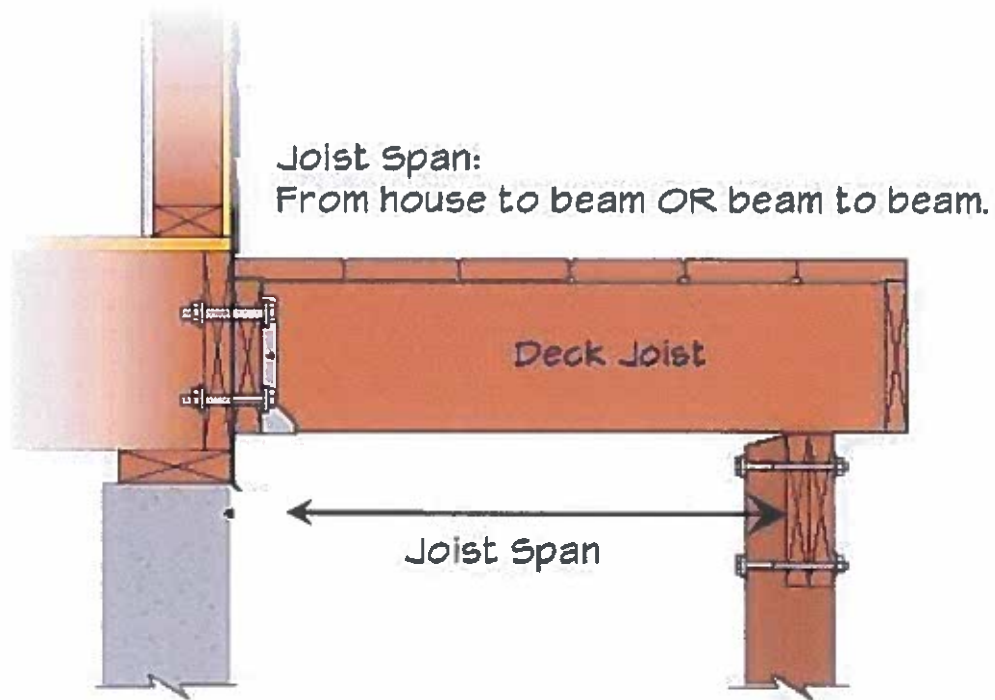


JOIST TO BEAM ATTACHMENTS



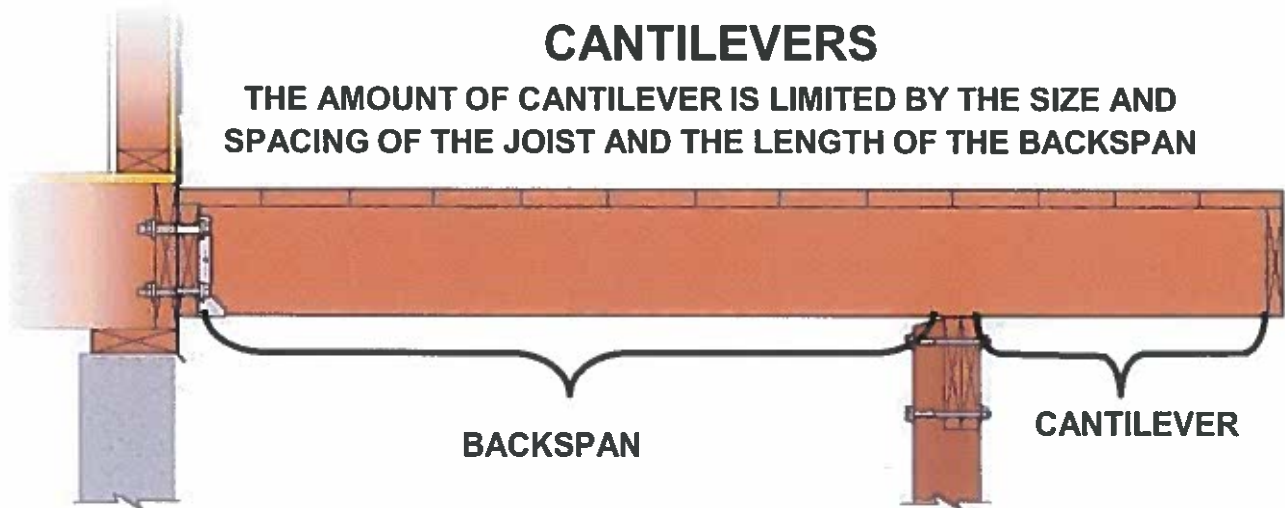
JOIST SPACING IS
DETERMINED BY THE
TYPE OF DECKING
USED. 16" O.C.
SPACING MUST BE
USED WITH 5/4 DECKING
OR WHEN 2X6 OR 2X4
DECKING IS USED AT A
45° ANGLE. 12" O.C.
SPACING REQUIRED
WHEN 5/4 DECKING IS
USED AT A 45° ANGLE.



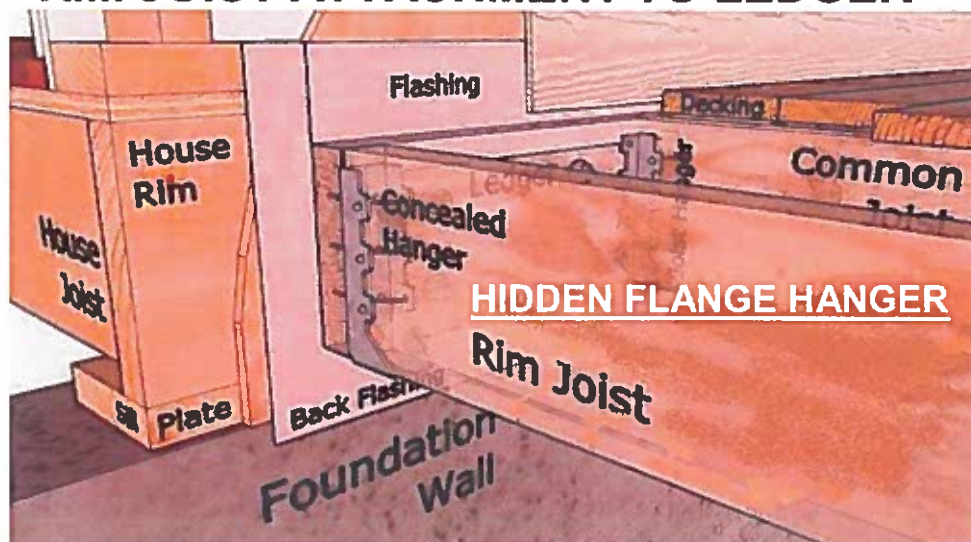


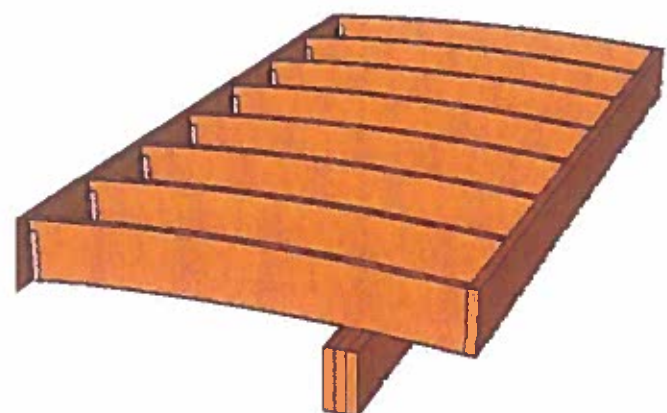
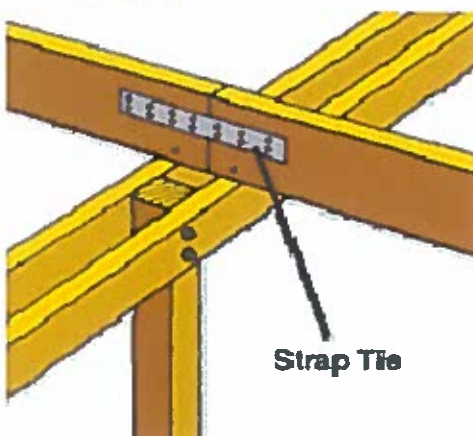
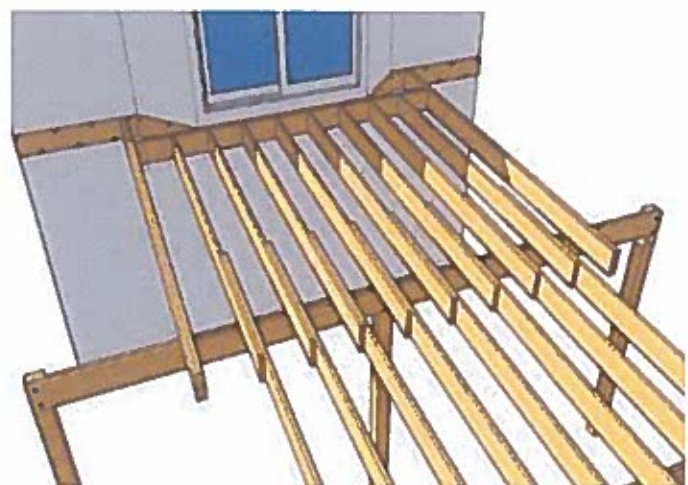
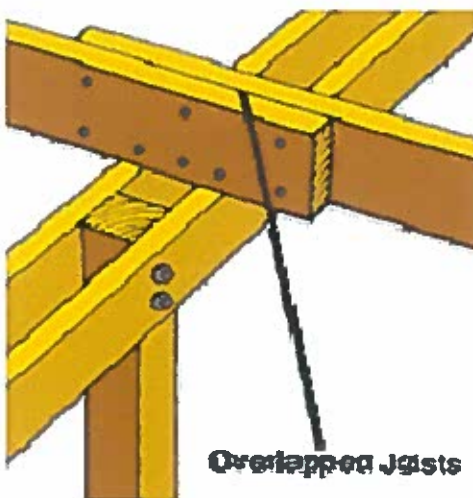
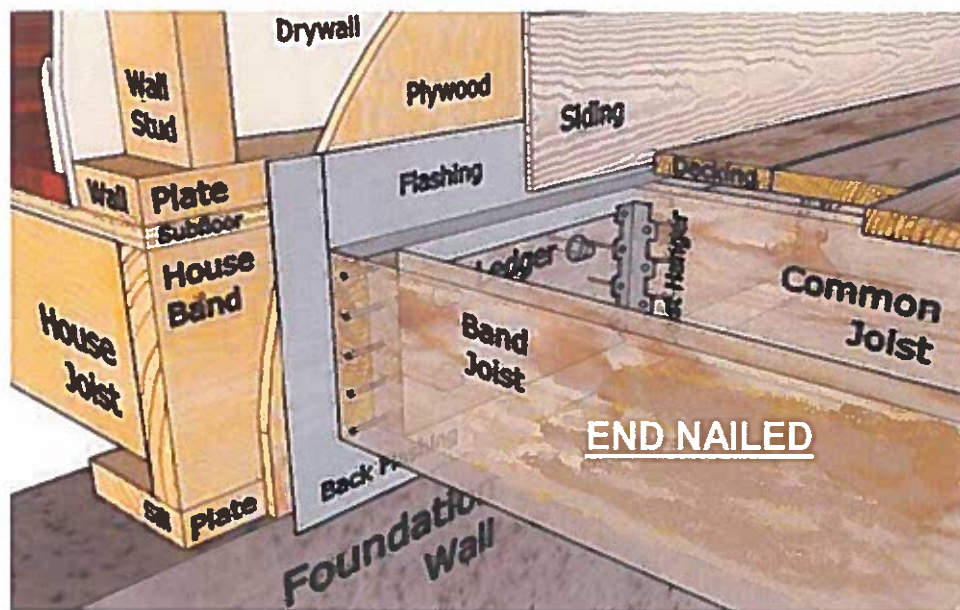
CANTILEVERS

THE AMOUNT OF CANTILEVER IS LIMITED BY THE SIZE AND SPACING OF THE JOIST AND THE LENGTH OF THE BACKSPAN

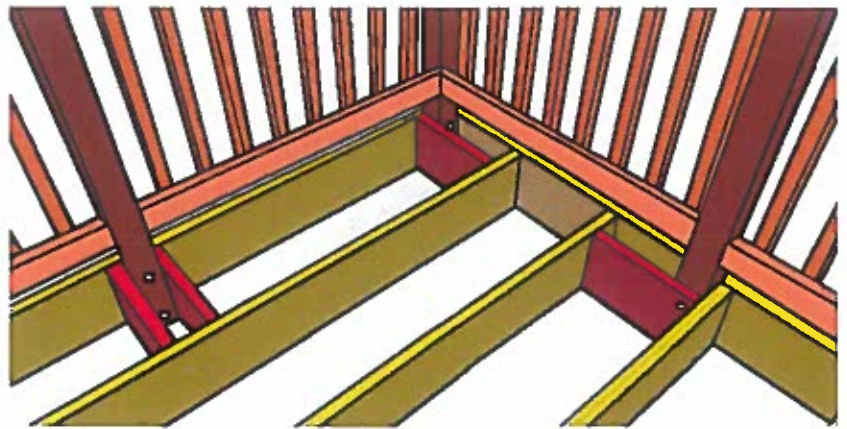


RIM JOIST ATTACHMENT TO LEDGER

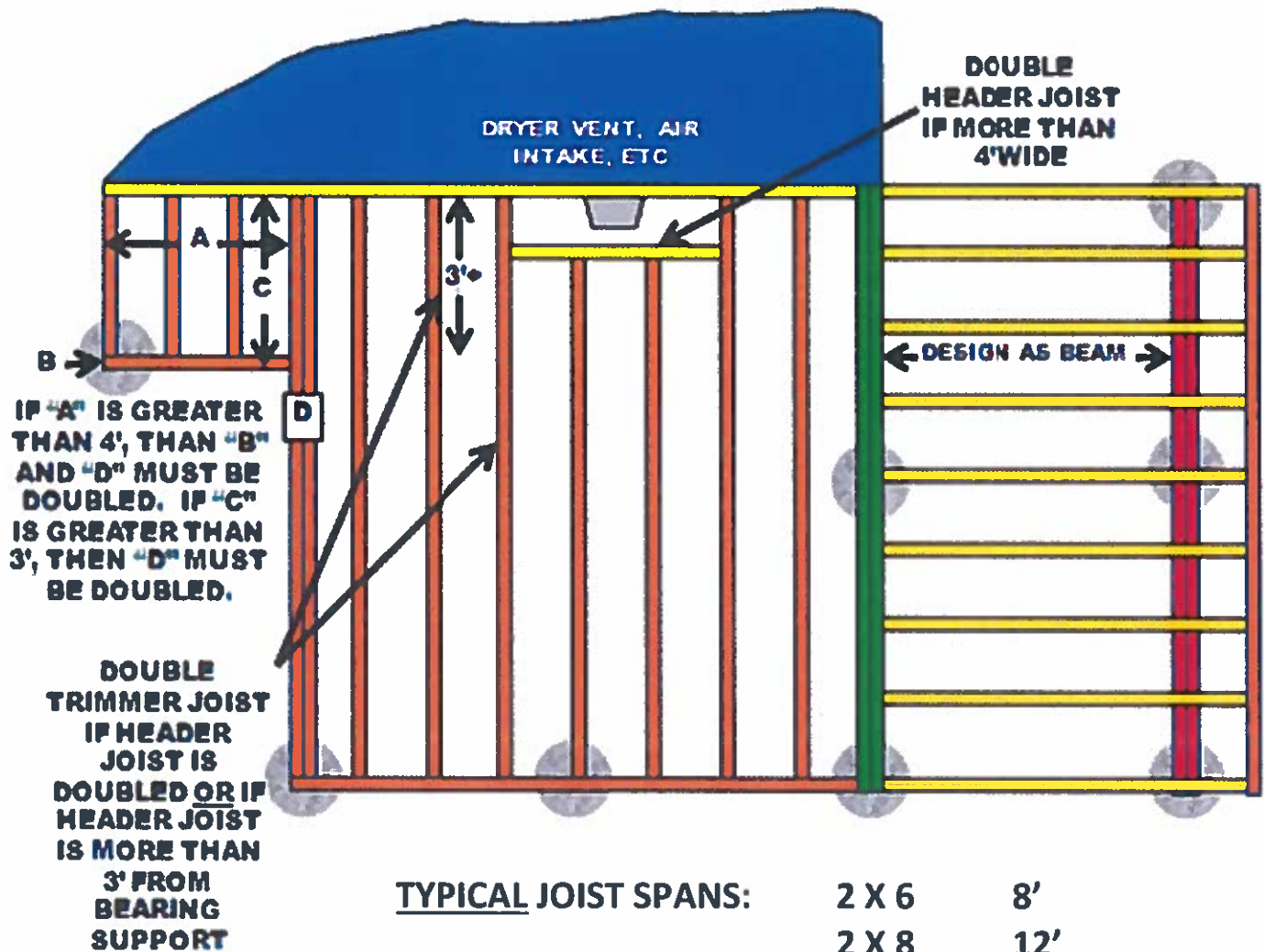




**AVOID NOTCHING
GUARD POSTS**



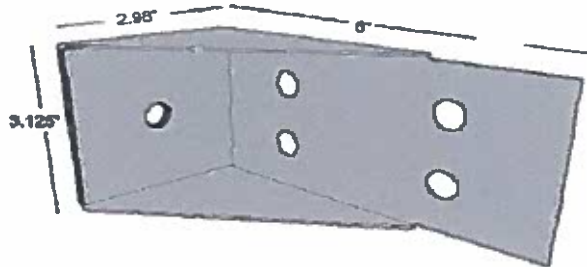
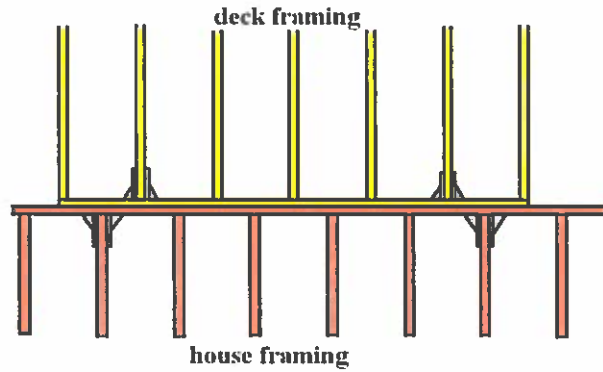
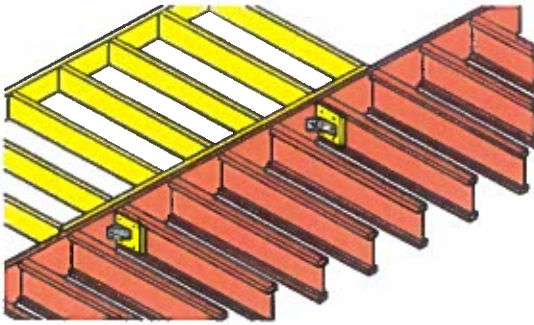
**BLOCKING MAY BE ADDED TO
STRENGTHEN POST ATTACHMENT**



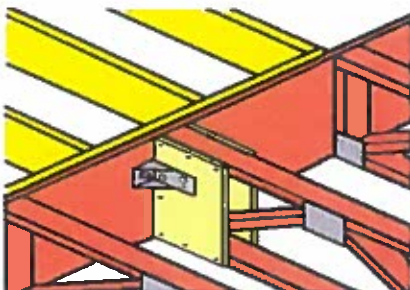
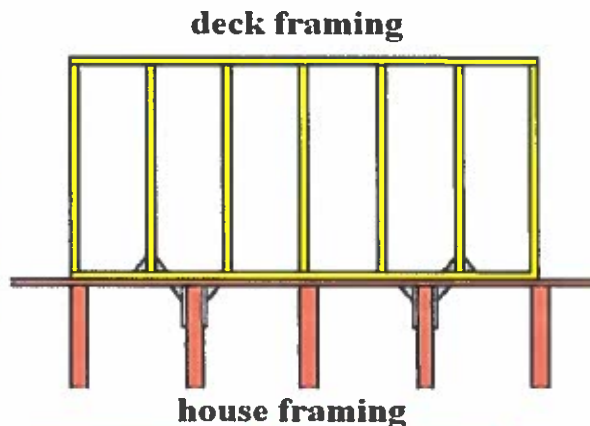
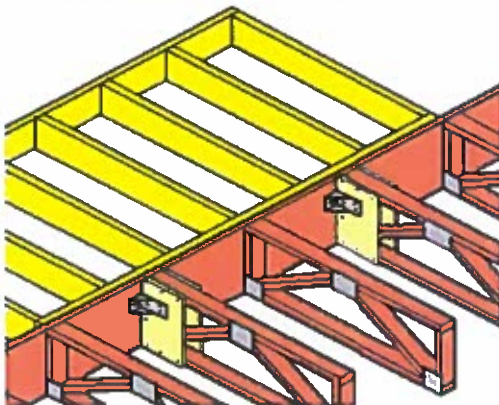
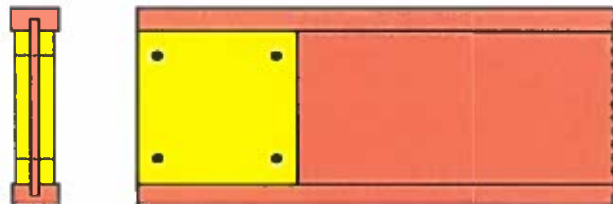
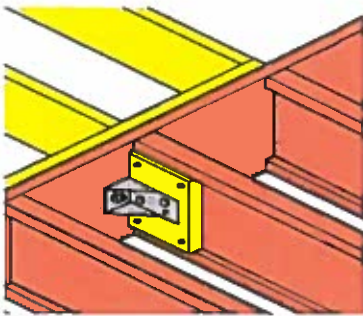
TYPICAL JOIST SPANS:	2 X 6	8'
	2 X 8	12'
	2 X 10	16'

AT 16" O.C.

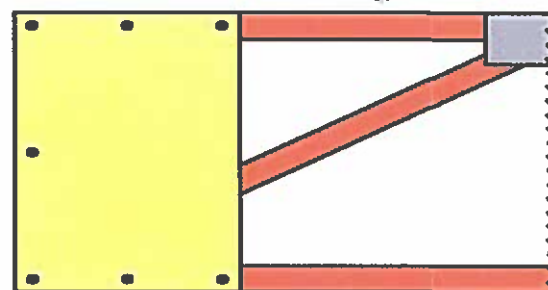
DECK ATTACHMENTS TO I-JOIST OR TRUSS FLOOR SYSTEMS



**INSTALL CONNECTOR IN
ACCORDANCE WITH
MANUFACTURERE'S
INSTALLATION INSTRUCTIONS**

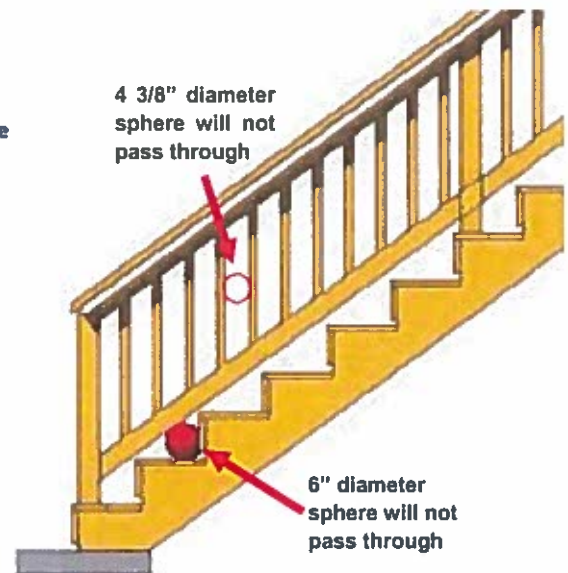
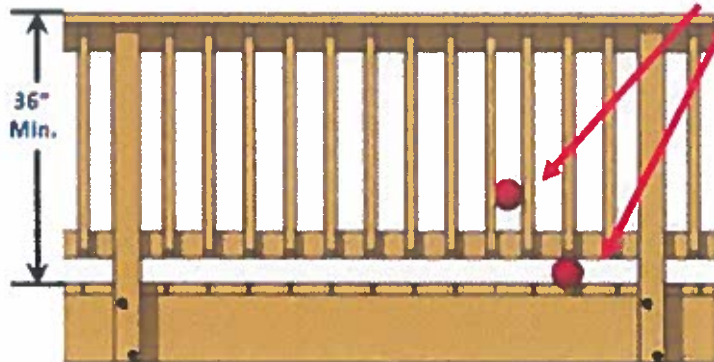


truss joist to rim joist & ledger



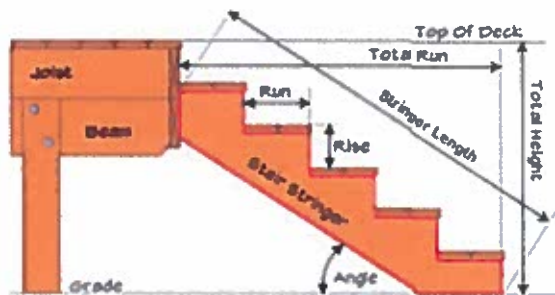
blocking plate nailed to truss joist

GUARDS



GUARD IS REQUIRED IF DECK IS MORE THAN 30 INCHES ABOVE GRADE

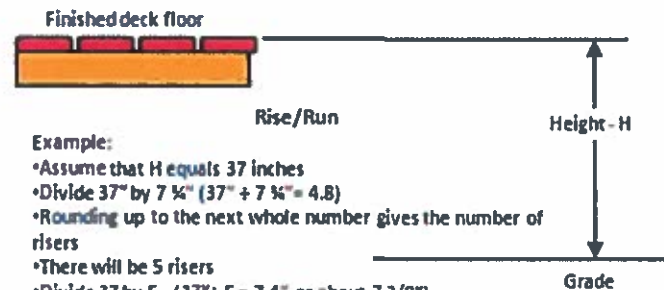
STAIR TERMINOLOGY



Stair Basics

- The maximum riser height is 8 1/2 inches
- The minimum tread run is 9 inches
- Treads and risers should be approximately equal with the largest not exceeding the smallest by more than 3/8 inch.

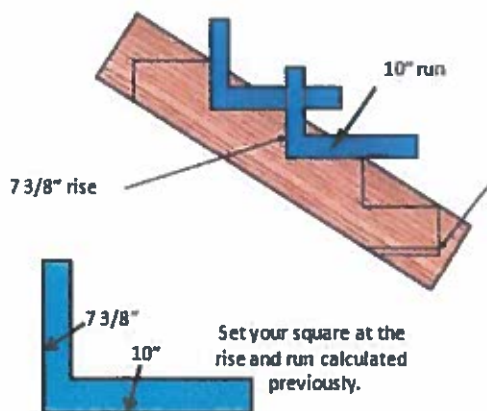
DETERMINING RISE/RUN



Example:

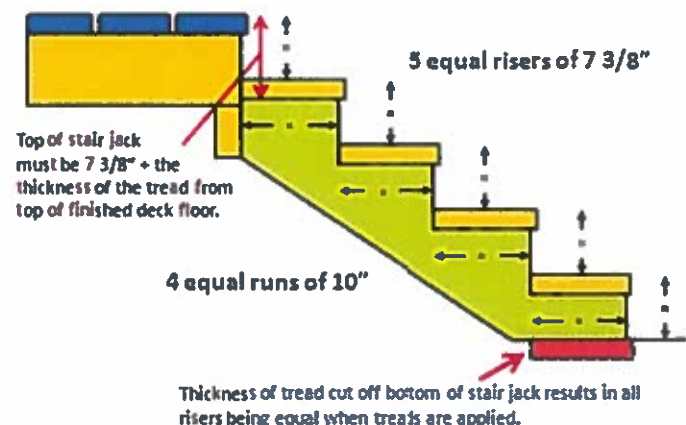
- Assume that H equals 37 inches
- Divide 37" by 7 1/2" ($37" \div 7 \frac{1}{2}" = 4.8$)
- Rounding up to the next whole number gives the number of risers
- There will be 5 risers
- Divide 37 by 5. ($37" \div 5 = 7.4"$ or about $7 \frac{3}{8}"$)
- Each riser will be $7 \frac{3}{8}"$
- For 5 risers there will be 4 treads
- Since each tread must be at least 10", the length of the stair from the face of the deck to the face of the bottom riser will be at least 40" ($10" \times 4 \text{ treads} = 40"$)

LAYING OUT STAIR JACKS

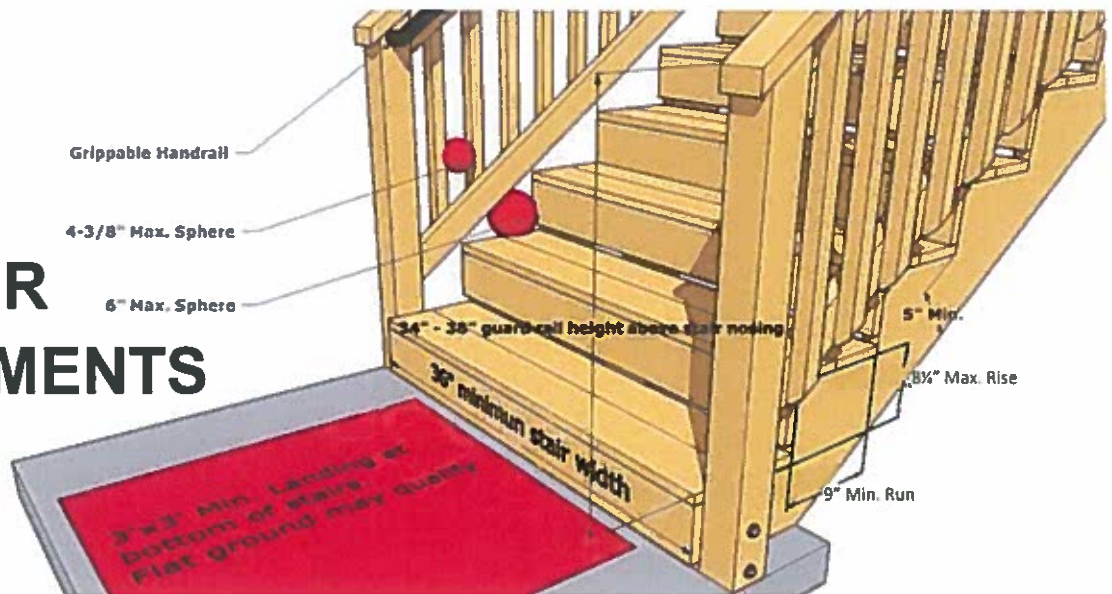


Cut an amount equal to the thickness of the tread from the bottom of the stair jack

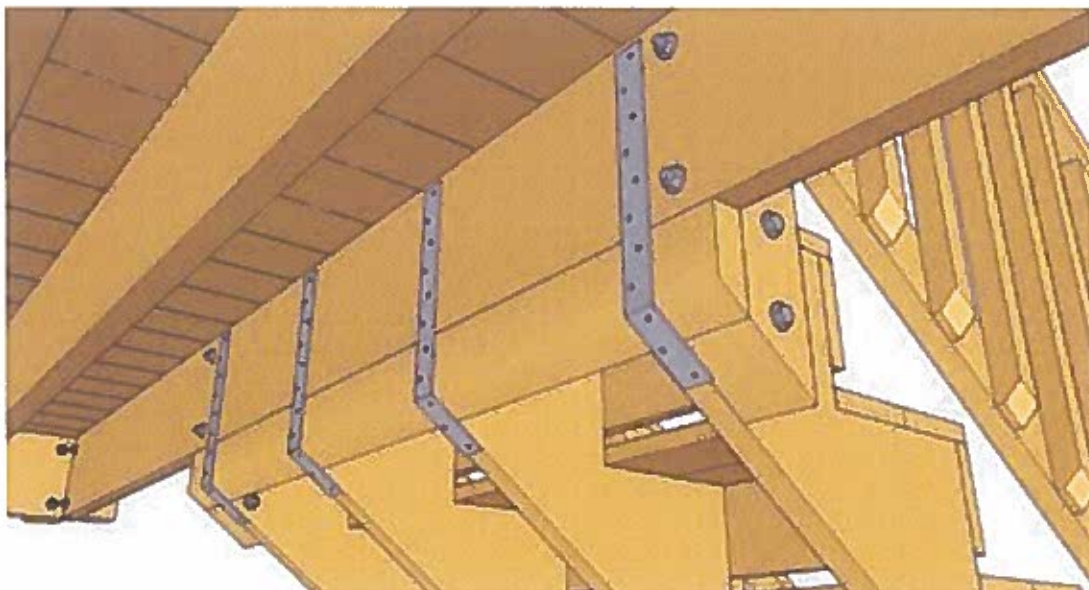
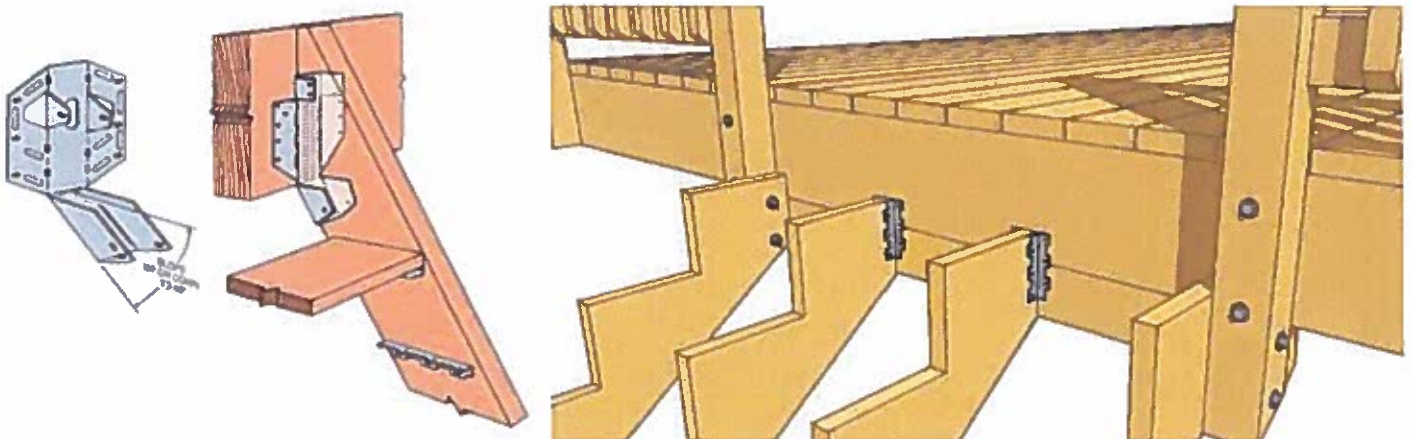
THE COMPLETED STAIR



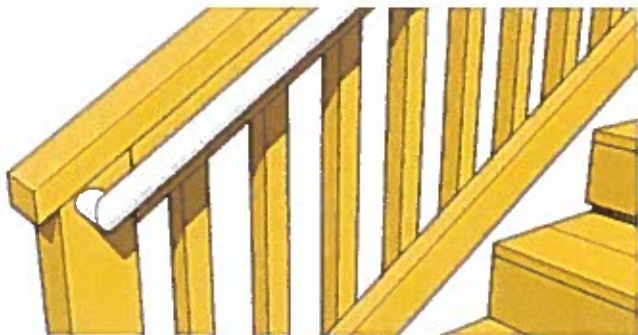
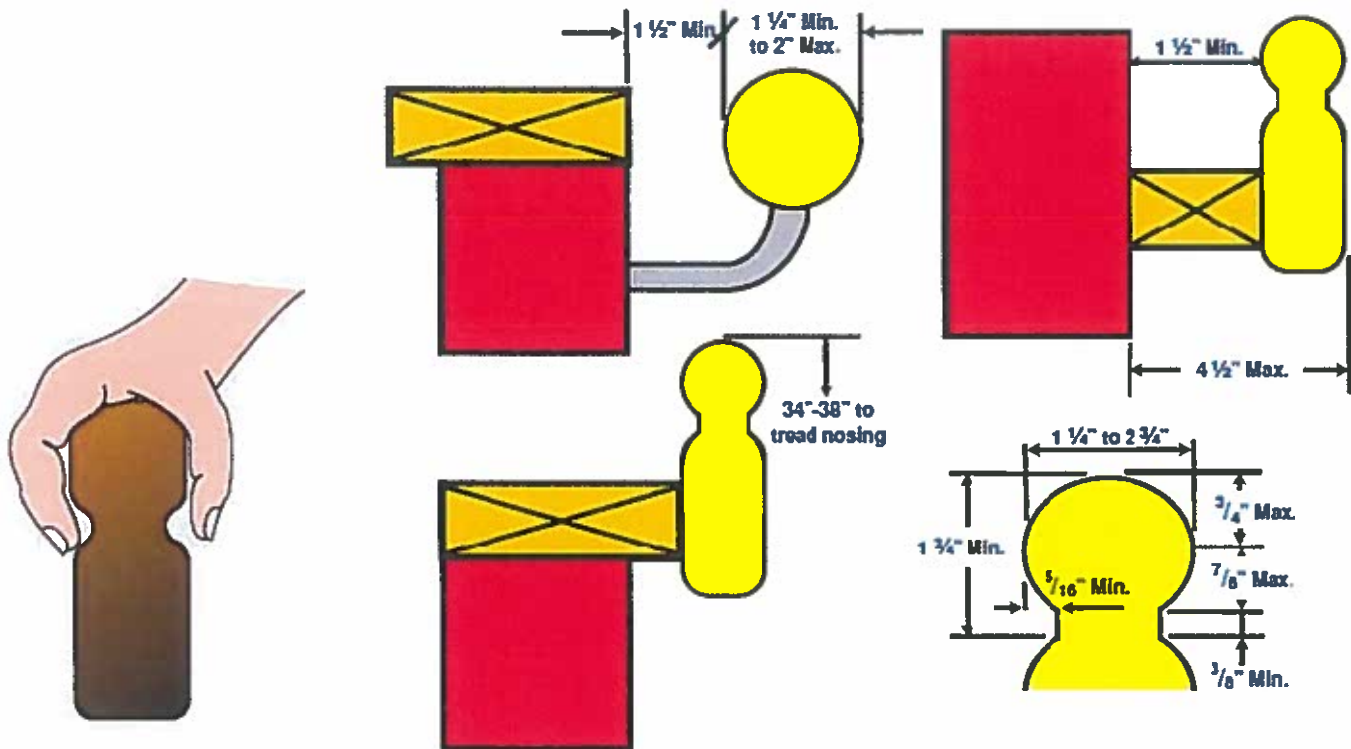
STAIR REQUIREMENTS



STAIR ATTACHMENTS



HANDRAILS



HANDRAILS MUST RETURN TO A NEWEL POST AND BE CONTINUOUS WITHOUT INTERRUPTION FOR THE LENGTH OF THE FLIGHT

COMPOSITES AND OTHER DECK/RAILING PRODUCTS

THIS HANDOUT DOES NOT COVER DECK OR RAILING PRODUCTS MADE OF COMPSITES, ALUMINUM, STEEL, GLASS, OR ANY OTHER MAN MADE PRODUCT. THOSE PRODUCTS MAY BE USED IF THE MANUFACTURER HAS A RESEARCH REPORT FROM THE INTERNATIONAL CODE COUNCIL AND THE PRODUCT IS INSTALLED IN STRICT ACCORDANCE WITH THAT REPORT.